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THE NEW-CHURCH REVIEW

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FORTH FROM THE SCRIPTURES BY EMANUEL SWEDENEORG

APRIL, 1913

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The REVIEW is seeking to set forth these principles, which are represented in the closing chapters of the Word by the symbolic New Jerusalem, descending from God out of heaven to a new earth (Rev. xxi, 1, 2). It is endeavoring to show their application not only to the organized New Church but also to the world in this period of transition and upheaval that is ushering in a "new era" of thought and life. In this effort it has been supported by able writers both in this country and abroad; and with such success as to call forth warm commendations.

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A SCIENTIFIC ESTIMATE OF SWEDENBORG'S "PRINCIPIA."

ARTICLE I.

MANY have desired to see the end of what has been called "The Warfare of Science and Religion." No one has done more to prepare the ground for a lasting peace between all departments of truth than Emanuel Swedenborg, even though the first result of his peaceful work was the precipitation of a conflict in which he had to vanquish a false theology. All warfare is destructive. Religion without science loses a most potent instrument for confirming higher truths through natural illustration; and science without the knowledge of a spiritual world of causes is a house without a foundation.

Earnestly pleading for reconciliation, we offer no apology for bringing science with its technical terms before the readers of this REVIEW, for many men of diverse minds must interchange views before unity can be brought about. Therefore it behooves students of religious doctrine to familiarize themselves with the language of science, since whether we wish it or not, natural science has come to stay, and to it have been given the keys of power in the natural world, even though it has lost the key to the house of life.

The appearance of a new edition of Swedenborg's "Principia" in English, together with a translation of the

cognate but smaller work called the "Minor Principia," furnishes occasion for a comparison of its teachings with the present trend of science. The years which have elapsed since the publication of Clissold's translation have witnessed great scientific progress in relation to some of the topics treated in this work; and there is now much new knowledge which will permit a more just appreciation of its teachings, as well as a more critical estimate of their value.

The complete work, which originally appeared in Latin in 1734, consists of three volumes, of which the first is devoted to a philosophical conception of the natural universe, and to the theory that its systems of suns and planets, together with its atmospheres (aura, ether, and air), have been produced slowly by a long series of orderly developments in successive stages, or by degrees. The end of this study is an explanation of magnetism as exemplified in the lodestone, and a first attempt to predict the changes in the earth's magnetism. This leads naturally to the subject of iron and its metallurgy, which is considered in the second volume; while the third volume takes up the metallurgy of copper. These have not been translated into English.

The title "Principia," first principles,— or to give it in full, *Principia Rerum Naturalium sive Novorum Tentaminum Phænomena Mundi Elementaris Philosophice Explicandi*,—immediately suggests the epochal work of Sir Isaac Newton, which preceded it by forty-seven years. Like its predecessor this book soars to the loftiest heights which the human imagination can attain. Newton's effort, however, is more circumscribed, and he soon comes back to the earth in a practical application of his gravitational discovery to the laws of planetary motion. Newton did not lack imagination, but he considered himself unauthorized to proceed beyond the limits of immediate verification of his principles by experience. He does not attempt to elucidate the cause of gravitation, but contents himself with demonstrating it as a fact, and stating its mathematical law.

Swedenborg has been less hampered by self-imposed limitations. Less cautious than Newton, he reaches out for

a larger freedom, and his outlook is much wider. He demands the cause and the complete history of the universe. He goes back of matter to an ether and an aura, and grounds his perception on an atmosphere which pulsates with Divine creative life. But having exhausted philosophy he, like Newton, at last comes back to earth and tries to obtain confirmation of his principles in the experimental facts of magnetic science, and to make useful application of his learning in those metallurgical treatises which laid the foundation of Sweden's greatness as a producer of iron and copper.

The first volume of the "*Principia*" is a monument to the patience and thoroughness of Swedenborg's preparation for writing his treatises on the metallurgy of iron and copper; and his virtue has its reward; for, while the practical dissertations upon the metallurgic arts, valuable and even unique as they were in their day, are now superseded in the progress of invention, the preliminary volume, in which the author approaches the subject of iron by first investigating the nature of its most peculiar property, that of its magnetic quality, and in which he makes a most noble and notable contribution to the theory of physical forces (the elementary kingdom, as he calls it), remains for all time an example of a spirit and a method, which ought to dominate every one who aspires to become a scientific philosopher.

Our author draws a parallel between the activities of nature and the development of the human mind; for, as the grosser particles of matter are more potent when controlled by the subtler fluids, by an electric ether or a magnetic aura, so man's insight into the principles which govern nature becomes more searching when from the grosser apprehension of the bodily senses he passes into a finer intellectual perception. Concerning this he says:—

In the state of ignorance in which we are at the present day, we gain knowledge only through experience; not merely our own individual experience and that of our own age, but the experience of the whole learned world and of many ages. When we have learned from our teachers what the learned world has discovered,

we are individually enabled to add new experience of our own, and thus continually to become more enlightened. I affirm, therefore, that at this day we are made wise only by means of experience; nor can we arrive at wisdom by any other path. It is impossible to receive knowledge immediately from the soul; man attains it only through the medium of organs and senses. (*Principia*, part i, chap. i, pp. 7-8.)

[But] although we acquire wisdom by experience alone, it does not, therefore, follow that they are the wisest who are the most experienced, or who retain a great deal in their memory; I affirm only, that they are capable of becoming wise, and that experience is the means which leads to wisdom. For experience, considered merely by itself, is knowledge, and not wisdom; it is only the threshold and entrance by which wisdom may be approached. He who has knowledge, and is merely skilled in experiment, has taken only the first step to wisdom; for he only knows what is posterior, and is ignorant of what is prior; thus his wisdom does not extend beyond the organs of the senses, and is unconnected with reason. He who desires to be wise is wise from both. (*Ibid.*, pp. 13-14.)

When a motion passes from a grosser medium into one that is more subtle, it becomes successively more sensible; and if more sensible, then more distinct. We are distinguished therefore from brutes by this, that their perceptions do not penetrate to so subtle a medium as they do in man, but that they stop as it were midway, where perception is not so acute and less distinct. (*Ibid.*, p. 11.)

[Of education it is observed] that man is perfected by exercise, and that the organs which are intermediary between the senses and the mind are formed by constant cultivation, and that without cultivation and exercise these organs would be closed. . . . The very slowness of his progress from infancy to manhood, contributes in a very fundamental and essential manner to the forming and opening of such organs or motions in the most subtle membranes; not to mention the construction of the brain itself. For we do not arrive at adolescence till after fifteen or twenty years, or more; whilst the larger, stronger, and more muscular animals arrive at maturity in between three and four years. (*Ibid.*, p. 12.)

The longer, therefore, an animal is in arriving at maturity and the full tension of its parts, the more open will the passage to its most subtle organs become, the thinner will be the coverings of its membranes and parts, the more compliant to the motions impressed on them, and the more numerous the ramifications into which it will extend; consequently, the more perfect will the animal become, provided the means which can perfect him are em-

ployed; which consist, as was before said, in perpetually calling his faculties into use, cultivation, and motion by means of education. (*Ibid.*, p. 13.)

This, which was new at the time it was written, is now so thoroughly recognized that it has been proposed by Bonaparte and Gill to divide the higher animals into two great groups, *Educabilia* and *Ineducabilia*, the former characterized by slower development with greater eventual capacity for receiving impressions from the environment and profiting by them, the other group arriving more quickly at maturity and provided from earlier age with instinctive knowledges which can not be changed to any great extent, so that adaptation to surroundings is largely mechanical.

After describing the mental attitude which must be assumed as a preliminary to acquiring wisdom, our author proceeds to "the second means leading to wisdom," which he finds in geometry and reason:—

The whole world itself, elementary, mineral, and vegetable, and also the animal kingdom, as to its anatomical organization, is a pure system of mechanism The science of mechanics is the law of nature herself as she acts and moves in the elements; and it is according to this that her parts have their motion both in the simple and compound. Without the elements and their regular disposition and motion, no mechanism could exist. As, therefore, the science of mechanics is the law of elementary nature, it can not be denied that the world itself is suitably governed by its laws and rules, and that the whole is a mechanism. (*Ibid.*, pp. 16-17.)

Swedenborg's is not the first attempt to formulate nature in terms of mechanics, nor will it be the last. Yet perhaps he has himself depicted the limitations of the method in what he says of the philosophy which ascribes nature to a mechanical relation of points as its source, in one of his latest writings when he had advanced to the deepest spiritual perception.

Unless an idea is formed of God as the primal Substance and Form, and of His Form as the absolute Human Form, the human mind may easily involve itself in spectral imaginations about God

himself, the origin of man, and the creation of the world. It would then conceive of God only as the nature of the universe in its first elements, thus as its vastness, or as emptiness and nothingness; of man's origin as a fortuitous concourse of elements into that form; of the creation of the world, that the origin of its substances and forms was geometrical points and their lines, which are essentially nothing, because nothing can be predicated of them. (True Christian Religion, n. 20.)

We may question how far this applies to some of the earlier writings, such as the "*Principia*," where we read: "Composite things derive their origin from simple ones; things simple from the Infinite; and the Infinite from itself, which is the sole cause of itself and all things" (chap. ii, n. 1, p. 53). The first entity, or simple, is called "the first natural point," and is compared to the mathematical point, yet at first with a difference:

If then it is admitted that the first simple was produced by motion from the Infinite, we are at the same time bound to suppose that in the producing cause there was something of will that it should be produced; something of an active quality which produced it; and something intelligent producing it thus and not otherwise, or in this particular manner and in no other; in a word, something infinitely intelligent, provident, powerful, and productive. Hence this first point could not come into being by chance, nor by itself, but by something which exists by itself; in which something there must also be a kind of will, an agency, and an understanding that it should be produced thus and no otherwise. There must likewise be some foresight, that the product should be successively modified in a particular way and no other; and that by this series, certain particular results and no others should arise. All this must of necessity have been in some way present in this first mode and motion; for in this particular and first motion of the Infinite, things future and coming to pass can be considered in no other way than as if they were present and already in existence. (*Principia*, part i, chap. ii, n. 5, p. 55.)

This certainly gives one a very different impression from that point of which "nothing can be predicated"; yet in n. 7 of the same chapter we read: "With respect to the essential of the first simple, I maintain that this natural point is the same as the mathematical point, or the point of Zeno. For

the world is geometrical or mechanical; nature modifies itself by the laws of mechanism, which are its own laws." Unless with the understanding that the first natural point is purely a center of force, deriving all of its quality from an outlying field of force, it is difficult to reconcile these statements. Yet Swedenborg declares elsewhere that he uses the point in his argument in the same way that infinitesimal differences are used in the differential calculus. Therefore his "points" have qualities of a fundamental sort, and their integral gives the reality of nature. We might appeal for further enlightenment to the "Minor Principia," were it not that this appears to be a first study in which the author is feeling his way towards a consistent theory. For that matter, there are parts of the larger work also where he is obviously groping in the dark. In "Minor Principia," n. 2, the first natural point is said to be "spherical."

Two divergent views of what Swedenborg means by his primitive natural points may be taken. In one, we have a vague conception of originating points of least dimension in space, much like the indivisible and incomprehensible "solid atoms" of early speculators. This may be called the apparent truth; but Swedenborg had passed through this phase before writing the final draft of the "Principia." If he speaks of moving "points," it is to regard them as in some undefined way in themselves organized and almost alive.

The other view regards the "first natural point" as really intermediate between the spiritual and the natural worlds, and therefore not of space. In order to be strictly consistent, however, it is then necessary to assume that the "first element" is a supra-natural atmosphere. If the first element represents energy, we may admit that it has an affinity to spirit. But the description of this element in "Principia," part i, chap. vi, n. 50, appears to give it spatial extension.

It consists of the smallest elementary parts. That it is the most universal, may be concluded *a priori*; because it is the origin of all the subsequent elements; because also it consists of the smallest constituent parts, can occupy the smallest spaces, and be present

where no other element can; therefore it may without doubt be concluded, that it is also the most universal. We may come to the same conclusion also *a posteriori*; for in the starry heavens we see with the eyes all the stars, as it were, present to us, yet this presence can not be effected without contiguity. Consequently from reason instructed by the senses we learn that there is nothing more universal than this element. From reason it follows that, in every system, both the greatest and least spaces are occupied by this element; and that this element is of all others the most perfectly contiguous.

The statement that "there is in the Infinite nothing substantial to be modified, there is no motion but what is pure" (part i, chap. ii, n. 13), is inconsistent with the teaching elsewhere that the Divine Substance is that out of which all things, both spiritual and natural, are made. Perhaps "material" would express the meaning here better than substantial.

The "pure motion" in which *conatus* consists appears to be in "purely intellectual space," perhaps a space of the fourth dimension. In speaking of the "active force in a point or finite," the motion is said to be internal, also "geometry is scarcely capable of entering into the analogy and reason of pure motion" (part i, chap. iii, n. 24, p. 99); but the fourth dimension had not then been invented. The "internal motion" of the point may have its analogies with what we are accustomed to call latent heat, potential gravitational energy, the potential explosive energy of gunpowder, and so forth. These, however, are temporary. The energy which keeps matter in existence, or the potential energy of the primal particles, is permanent.

Swedenborg is not always clear in speaking of motion in space of three dimensions. Thus assuming (part i, chap. iii, n. 24) that the component points in a particle follow spiral trajectories, there can be no single center of motion as in a circle, but the centers of curvature of the spiral path themselves describe a figure. Hence it may be said correctly of a single, component, moving point, that the center of the orbit "is not in the middle, but is near the middle of the particle of the separate part or point"; but when the

author applies this to the "center of gravity" which does not even remain *near* the center of figure, but varies its position from center to circumference, his language is inaccurate.

Again, speaking of the elementary particle (part i, chap. vi, n. 8, p. 193), "in elementary particles the center of gravity is in the surface," if he had said "centers of gravity," this would have been consistent with a bubble-film conception; but the actual language seems not to consider that on the average the congruous motions of many centers flowing simultaneously in harmony in the surface of a composite particle, produce a center of gravity for the total volume which is at the center of figure, as Newton demonstrated.

Swedenborg's general conception of an elementary particle assumes a composite consisting of the revolutions of component points in spiral orbits, called "axillary motion," and a slower rotation of the orbital planes about a series of varying diameters, called "progressive motion," with the instantaneous direction of this motion an "ecliptic," while the plane of the axillary motion is always tangent to reentering, conical, polar depressions, having their apices at the center of the particle.

The description of the "first" element is couched in terms wholly spatial; yet an intermediate, or even a purely spiritual atmosphere, perhaps animating the second, or magnetic element (assuming the latter to be the medium which fills space), would clear up those discrepancies in our author which speak sometimes of the natural atmospheres as three in number, but elsewhere as four. These things may be seen as in an image if we compare the three atmospheres of the natural world with the three degrees of heavenly life which receive as many successive openings of interior power from more and more perfect reception of life from the Lord, and then note what Swedenborg says of the heaven of human internals "above the inmost angelic heaven; wherefore these internals are the habitations of the Lord himself" (Arcana Cœlestia, n. 1999). This

heaven of human internals which is beyond even the angelic consciousness, and which can not be controlled or interfered with in any way by finite beings, is a holy of holies in which the Lord dwells. It appertains to man and yet partakes of the Divine, that is, this heaven of human internals is an intermediate between the finite and the Infinite. Similarly, nature is connected with the spiritual world through an intermediate which appears to be what Swedenborg means when he names a fourth atmosphere, namely, a connective which is in space, but not of space.

Greater fulness and power, richer and more intricate detail, far-reaching complexities of relationship, greater freedom, and a close approach to qualities commonly associated with life are found as we approach the beginnings of physical forms. Though Swedenborg speaks of his primal forms as "simple," his thought gradually turns towards the acknowledgment that primal forms are really the most complex.

It seems as if things prior must be less perfect than things posterior, that is, things simple than things composite; but things prior out of which things posterior are formed, that is, things simple out of which things composite are formed, are the more perfect. The reason is that the prior or the simpler are more naked and less covered over with substances and matters devoid of life, and are, as it were, more Divine, consequently nearer to the spiritual sun where the Lord is; for perfection itself is in the Lord, and from Him in that sun which is the first proceeding of His Divine Love and Divine Wisdom, and from that in those things which come immediately after; and thus in order down to things lowest, which are less perfect as they recede. (*Divine Love and Wisdom*, n. 204.)

The formation of matter by more and more complex compounding of primitive simple particles is an apparent truth on which a good deal of scientific reasoning has been based in the past. Facts have gradually compelled its abandonment. The primitive particles appear more and more as merely centers of forces whose fields are of infinite range, and nature seems to consist of these interwoven fields of force. The present trend of science is in complete

agreement with the passage last cited. The "Principia" is not always perfectly clear on this point, nor could it be until its author had received experience of the spiritual world and its sun. Yet already in his "Worship and Love of God" there is the conception of a higher form than that of the lower orders of geometrical shape.

Another, at first sight, discrepant passage is that part of "Principia" (part i, chap. vi, n. 50) which says that the interplanetary and interstellar medium which conveys light to us "from the remotest stars" is the first element. Yet the first element according to his own teaching is not that which conveys light, except in so far as the ether may be made out of it; for it is the ether, he says, which conveys light. It would be more appropriate to speak of the magnetic element (also made out of the first) as the universal interstellar medium; and in fact Swedenborg gives it this rôle where he says that by this new element "Titan extends the rays of his empire and his arms and scepter into the remotest regions of the universe." (Principia, part i, Introduction to chap. ix, p. 216).

The first element can no longer be identified with the luminiferous ether. But can Swedenborg's third element to which he gives the name of ether, and which he associates with light and electricity, be a luminiferous medium filling all space? Apparently not; for in Swedenborg's system each sun and planet is supposed to be surrounded by its own ether, each having thus its attached ethereal or electric atmosphere extending beyond the aerial one to a great distance, but still *not* a part of a universal interstellar medium. This is not a defect in Swedenborg, as we shall see; but the explanation of the apparent difficulty contains the crux of the whole matter.

Here is the dilemma: The ether is *not* a universal atmosphere, yet it is necessary for the conveyance of light from the remotest stars. Evidently, Swedenborg, though distinctly embracing a vibratory theory of light, nevertheless, since he makes his ether to consist of distinct spherical particles, and these not uniformly distributed throughout

space, but aggregated around material centers, must have formulated to himself a conception intermediate between those of Newton and Huygens, and must have regarded light as a local onward progression of ether particles, each retaining a vibratory motion communicated to it at the moment of its emanation from the luminous source. In this case, since the ether particle is formed out of antecedent media, and is, in fact, itself but a mode of motion in a medium consisting at bottom of nothing but energy, it may still be said that the pristine medium is universal and is requisite for the transmission of light from star to star, when yet the actual instrument of this transference is a distinct entity.

The ether particle has two modes of motion, namely, one which is constitutional, by which it is differentiated from a universal medium and given both individuality and a position in space, so that this particle can either remain at rest connected with other ether particles, or ethereal modifications which constitute the chemical elements, or it can receive a local motion, together with an oscillatory one, and become a light ray. This appears to be the only view which will reconcile statements that would otherwise conflict.

Have we any evidence from experimental science in favor of this conception? Yes, evidence which may be interpreted in this way undoubtedly exists; for in recent years science has been brought up suddenly by the dilemma that the Michelson-Morley experiment demonstrates that the ether apparently moves with the earth, while the combined evidence of the Doppler effect and the aberration of light proves that the rate of vibration of light is affected by the speed of the source, and its apparent direction by that of the earth's motion, and yet the *aberration is not changed by the speed of the shell of ether attached to the recipient earth*, but the light rays exhibit a reckless independence of control very disconcerting to the physicist, which has led to lengthy debates on the "relativity" problem wherein a mathematical metaphysics, which is distasteful to many scientific minds, has so far had the upper hand. I venture

to suggest that Swedenborg's hypothesis may prove a welcome haven from these contentions.

The universal medium is still needed to preserve the principle of continuity, and to serve as the substantial basis out of which ether particles and electrons can be formed; but the light-bearing ether-particle in transit through space is an independent entity formed out of the universal interstellar medium, though uncontrolled by it. The light-bearer continues on its way undisturbed unless it meets other ether particles also conveying luminous energy, when there may or may not be interference, according to the complex laws of physical optics, but it does not in any case interfere with the earth's attached ether, for this carries no similar vibration, or is not a light-bearer; and finally, as a *universal* medium, we now agree that *there is no ether*. Its place is taken by the medium called the magnetic element in the "Principia," but which Swedenborg names "the aura" in his "Economy of the Soul's Kingdom."

Nearly all of the speculation in regard to a light-bearing medium during the reign of the undulatory theory applies, not to the ether, but to the medium back of the ether which is Swedenborg's magnetic element, or aura. The velocity of light is that of an undulatory process, and is independent of the velocity of the light source. The process is to be regarded either as an oscillation, or as a recurrent deformation, of an ether particle with reference to one or more planes of symmetry passing through its center of figure.

The velocity of an ether particle must be distinguished from that of the phases of its vibratile state. The latter may be denoted by $c=3 \times (10)^{10}$ cm. per sec., while the relative velocity of the ether particle with respect to the observer is $c \pm V$, where V is the relative velocity of the light source.*

*In the theory of Ritz (Archives de Genève, tome xxvi, p. 232, 1908) the center of a system of ether waves has the same motion as the light source, and if the light be reflected from a mirror, it spreads in spherical waves around a new center which moves in a new direction, but with the speed of the original source.

A universal medium of some sort has always been recognized as a mechanical necessity. In recent times Osborne Reynolds has developed a mechanical system founded on the supposition that the physical universe has a minutely grained structure from whose fluid properties all things are developed by motion from accession of energy. This is Swedenborg's doctrine of simple or initial points and *conatus* over again, but in an entirely different form, and lacking the vitality which he pours into his "points." The hypothesis came through the experience of Professor Reynolds as an engineer, and from the profound studies which he was compelled to make of some of the problems of shifting sand in engineering practice. Reynolds concluded that *if* the world is purely a mechanism, it must be constructed on the principles which he has formulated in his profound mathematical analysis. Reynolds' hypothesis boldly reverses the ordinary conceptions, and asserts that space is filled by incompressible, smooth, spherical grains in mutual contact according to the geometrical laws of mechanical piling, save where the centrifugal pressure of rotating groups forces back the surrounding medium, forming vacuoles which are the rudiments of matter—a pure negation, having no reality of its own, deriving all of its power from forces which are the resultants of the infinite motions in the surrounding immensity. The hypothesis has one enormous advantage over all of its competitors. It gives a workable mechanical explanation of gravity and of the conservation of energy; for all parts of the physical universe are supposed to be in virtual mutual contact through the transmitted pressures, and if matter, or what is the same thing, the energy of rotation of the enclosing shells of rapidly revolving grains, were to be destroyed at any point, the collapse would open out new vacuoles and produce new motions somewhere else. These and many other phenomena are satisfactorily explained by Reynolds' hypothesis; but there are several other facts, notably some electrical ones, which obstinately refuse to be included, and we are again left with the doubt whether nature is, after

all, wholly mechanical. Moreover, if a literal definition of mechanics as involving mass, length, and time be insisted on, the medium out of which matter is to be formed is not included, since it has not yet received the property of mass. Reason, however, compels us to recognize that a primal *conatus*, or the power involved in motion of a substance which does not yet possess the properties of matter (including gravitational mass) is to be anticipated, and the definition of mechanics may have to be extended for this purpose. Swedenborg's voice at the time that he was writing the "Principia" spoke in favor of mechanism. He says:

Although there may be innumerable worlds, nothing can exist in any finite world which does not depend upon some mechanical principle, and a similar principle of geometry must be common to them all. Whoever supposes the world to be constituted in any other way, must take refuge in occult qualities, that he may conceal his ignorance and preserve his reputation as a philosopher in the learned world. He whose mind is well formed can not deny that the world is composed of elements; that elements are composed of particles; that particles are composed of spaces and forms; that particles of definite form are the result of motion, and of situation suited to such motion; and that motion and situation have their proportions. As all things in the world which possess motion and limits, are mechanical, it also follows that the smallest natural things, as well as the largest, flow in a mechanical manner, and that the smallest and largest are governed by similar mechanical principles. (*Principia*, part i, chap. i, pp. 17-18.)

This, however, though strongly stated, is not meant to be as dogmatic as it seems; for elsewhere he says:

Should any person perceive in the principles here laid down only what disagrees with experience, or with analytical geometry; or should he be able to point out anything imperfect or defective in them; if he will have the kindness to communicate the same to me, I shall receive his hints with gratitude. For truth is but one. Truth is my single aim; and if any friend will educe from his treasury of knowledge a juster and truer representation of the subjects in hand, his kindness in so doing will be esteemed a most acceptable service. (*Ibid.*, p. 78.)

After all, alas! what is our wisdom?—truly such as what is finite is to what is infinite; and in respect, therefore, to the wisdom of the Infinite, nothing. (*Ibid.*, p. 10.)

These expressions of humility and of readiness for and expectations of emendations from friendly critics breathe the genuine scientific spirit, and should forever dispose of the insane delusion that Swedenborg has given us an infallible system of truth from which nothing ought to be taken away, to which nothing essential can be added, and before whose bar of judgment all rivals must bow. It would be most unfortunate if the "Riddle of the Universe" could thus stand completely revealed. There would be no further need to search out causes, and the zest of philosophic investigation would be gone. The bare assertion of authority in the name of the great master, Aristotle, held back the progress of science for ages; but no such new scholasticism can be successfully built on Swedenborg's science, for he himself has undermined all such Babel towers of pride by his frank humility.

The subject of the present treatise is thus defined:

The elementary kingdom comprehends all those substances which are fluid of themselves and by their own nature, every particle rejoicing in and thriving by its own peculiar motion and elasticity. A group of these constitutes an element, such as air, or ether, or others still more subtle. (*Ibid.*, p. 3.)

The mechanical principles which rule in the motions of the heavenly bodies and in those which can be repeated in laboratory experiments are assumed to continue in the smallest things which are beyond our sphere of vision,

and though the particles of the elements are invisible, and in a great measure elude the observation of our senses, yet, as they are fluent and bounded, they are geometrical, and must flow and subsist in a mechanical manner. (*Ibid.*, p. 18.)

With this proviso he proceeds to explore the mysteries of magnetism by first conceiving a system of degrees of vortical motion in successive fluid media. The formulation of working hypotheses was necessarily speculative. It could first be tested by comparison with the known facts of the magnetic motion and phantom. Here the careful

experiments of Musschenbroek were drawn upon for confirmation. We must suppose that these facts had been more or less in mind in the previous speculation. Yet Swedenborg had given free reins to his imagination, guarding himself solely by the compact that the motion must be mechanically possible.

Let us take a glance at the state of magnetics at this time. We find that Gilbert, the author of the first really scientific treatise on magnetism (published in London in 1600), held that the magnet has a soul. He says:—

[The magnetic orbs—the earth and the sun—] awaken life, and therefore they are living . . . The globes themselves remain and continue from year to year, move and advance, and complete their courses without waste or weariness . . . But those motions in the sources of nature are not caused by thinking, by petty syllogisms and theories, as human actions which are wavering, imperfect, and undecided; but along with them reason, instruction, knowledge, discrimination have their origin, from which definite and determined actions arise from the very foundations that have been laid and the very beginnings of the universe; which we, on account of the infirmity of our minds, can not comprehend. Wherefore Thales not without cause (as Aristotle relates in his book *De Anima*) held that the lodestone was animate, being a part and a choice offspring of its animate mother the earth. (*De Magnete*, Book 5. chap. xii.)

It is common today to deride such arguments as "anthropomorphic" and as savoring of the fetichism of savages; but let us not be debarred by ridicule from admitting that in this respect the ancients were wiser than the moderns, since that supreme law which rules the physical universe is not discerned immediately by the senses, but by the intellect which is itself of one substance with universal law. Thus spirit includes nature as a special case, but is itself of far wider perfections; and the universe has a Divinely human soul which incites the evolving systems and kingdoms of nature into orderly progress, in spite of the imperfect vision of perturbed philosophers who imagine that they could have made a better world than the one we live in.

When the old world is sterile
And the ages are effete,
He will from wrecks and sediment
The fairer world complete.
He forbids to despair;
His cheeks mantle with mirth;
And the unimagined good of men
Is yearning at the birth.

Spring still makes spring in the mind
When sixty years are told;
Love wakes anew this throbbing heart,
And we are never old.
Over the winter glaciers
I see the summer glow,
And through the wild-piled snowdrift,
The warm rosebuds below.

(Emerson's "The World Soul") .

We hesitate to try to improve on this beautiful vision, but science demands something more explicit with more of rational conception, even at the cost of less beauty and poetic feeling. Swedenborg gives us just this happy medium between the poet's fancy and the unfeeling arguments of the logician who, after destroying the poet's romance, hands him back nature as a cold corpse and denies that it ever had any life. The children and the poets should ever be grateful to Swedenborg for giving them the assurance that there is a Divine science which will restore to them the lost ideals, cruelly strangled by a monstrous materialism, and will give them back their world of fancy redolent with new life and beauty, yet, after all, and above all, guarded by, and founded on a true scientific philosophy which can not be shaken.

Almost at the beginning of Swedenborg's thesis we come to the word "*conatus*" described in terms which strongly suggest that he is thinking of what we now call "energy." Matter itself is a form of energy, in this case locked up so that we can not avail ourselves of its power. The physical forces are variations in the redistribution of energy which assumes many forms in transit. Magnetism and electricity

approach very near to the source of power and give marvelous illustrations of what energy could do if untrammelled. De Volson Wood calculated that if the luminiferous ether had the properties of a gas, its specific heat must be five millions of millions times that of water. If matter possesses hidden properties and underlying energy of this order (and it is quite likely that it does possess it, though not manifestly), the thermal energy set free by burning a mass of coal is a mere bagatelle compared with the energy of internal motion locked up in the atoms. If there were any way of gradually destroying the atoms and setting free their stores of latent energy at will, the engineer could put in his pocket enough stored-up energy to carry his steamship around the world.

Some such vision of an almost infinite energy seems to have been included in Swedenborg's *conatus*, or effort to effect motion, which he considered to reside *inherently* in his primal particles. These therefore appear to be particles of energy. The transmutation of some of the elements and the continued production of thermal energy from matter, which can be used as a source of perpetual motion, are facts which in a way fulfil the dreams of the alchemist and the inventor, and show that those dreams are not necessarily as chimerical as was supposed a few years ago. At present, although there is no doubt that such wonderful transformations exist, they have apparently been removed from man's control. Yet it may be that when man is worthy to receive greater power, knowledge of the way to unlock these mysteries will be given. Heaven's gates and the door to nature's treasure-house are opening *pari passu*.

The primitive motion is conceived as a perpetual circulation and a continual reciprocation, but with an inconceivably great velocity. The *conatus*, or tendency to produce these effects, evades visualization. It can only be likened to a pressure from the Infinite which is without space, exhibited in space through point-sources of energy. Thus the "natural point" is an intermediate between the Infinite and the finite.

Swedenborg's laurels in experimental physics must rest upon his investigations of the magnet, founded on the work of Musschenbroek who devised and performed a number of experiments elucidating the phenomena of magnetic attraction. On this basis Swedenborg formulated a consistent theory of magnetism as a circulation of a magnetic element whose origin is traced back to a medium more universal than the light-bearing ether. This moving fluxion of the magnetic element is asserted to surround the magnet like an atmosphere. Separated from the universal magnetic aura by no other bounds than those of a local vortical motion, the earth is said to be encompassed by a magnetic aureole. A spiral flow brings an influx of the magnetic medium to the earth's south magnetic pole (which corresponds to the north-seeking pole of an ordinary magnet) and this flow passes on by gently curving spiral paths along the earth's surface (the isogonic lines) and out at the north magnetic pole. The lines of the magnetic phantom map out in a general way the direction of this magnetic circulation.

For evidence of a similar form in the celestial spaces, we must pass to astrophysics. In February, 1901, there appeared a remarkable nova in the constellation *Perseus*, and during the following year various patches of faint nebulosity were photographed in the vicinity of the star by Perrine, Ritchey, Max Wolf, and others.* These masses were found to be moving with enormous velocity, the highest speeds possibly approaching that of light. The luminosity was a case of Goldstein's "canal rays" on a gigantic scale, and was susceptible of guidance by a magnetic field. In the accompanying figures (see the inserted sheet, Figures 1 to 4) I have drawn the outlines of some of these nebulous forms, and have assigned letters to them for their better recognition. On following up the directions and rates of motion, I find that, while there may have been a general outward radial tendency at the start, there is a

*See especially G. W. Ritchey, *Astrophysical Journal*, vol. xv, p. 129, March, 1902.

NEBULOSITY AROUND NOVA PERSEI



FIG. 1. Sept. 20, 1901



FIG. 2. Nov. 13, 1901



FIG. 3. Jan. 7-9, 1902

(The Arrows on Figures 2 and 3 denote motions between the given dates. An additional drawing which has been utilized in getting the motions, is omitted.)

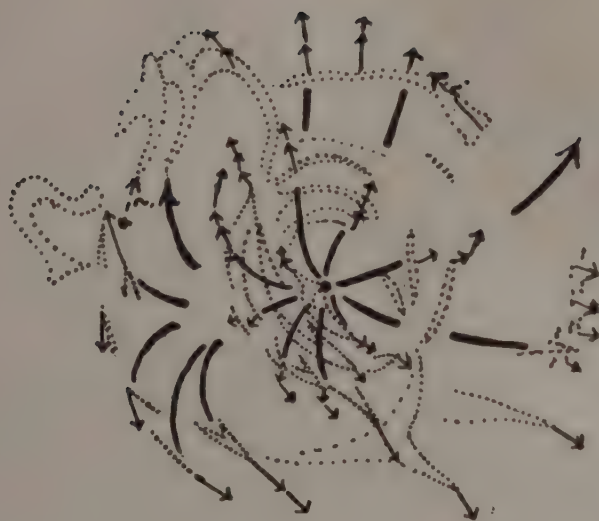


FIG. 4. Loci of movement

pronounced curvature away from radial directions as the motion progresses, and also a retardation of the velocity; and the general tendency of motion shown in Fig. 4 does not disagree with that along portions of the lines of a gigantic magnetic field of force centered in the star. We may regard this as confirmatory of Swedenborg's hypothesis that there is a universal magnetic element, that it has intimate relations with stellar centers and can control the motion of light material even though the planets move independently.

Swedenborg supposes that a substance which has the possibility of becoming magnetic, but has not yet been magnetized, consists of polar particles which are least magnets having their axes pointed indiscriminately in every direction; and he assumes that in the lodestone, or natural magnetic oxide of iron, the axes of some or all of the particles have become parallel, so that the individual magnetic forces mutually assist each other and form a common magnetic vortex or vortical flow of the magnetic aura.

Over a century later, this hypothesis was revived in a modified form by W. E. Weber and applied to the conception that the chemical molecules of ferromagnetic minerals are permanently magnetic, but that owing to internal cohesive forces they are not entirely free to turn, so that, unless the magnetizing force is very powerful, only a few molecules assume parallel positions, and the actual molecular deflections from magnetizing forces are presumed to take place under a cohesive elastic strain which restores the original configuration when the magnetizing force ceases. This explains the behavior of soft iron armatures very well.

Maxwell, in his "Electricity and Magnetism," Art. 444, added the further proviso that, if the molecular axes are deflected far enough, and if the cohesive bonds are not too strict, the deflected molecules may experience a permanent set and remain in their new positions after the removal of the magnetizing force, constituting a permanent magnetization. This partially explains the magnetic hysteresis.

Finally, Ewing demonstrated by a model composed of little compass needles, grouped together and surrounded by a large magnetizing coil, that the cohesive forces, as well as the hysteresis and other effects, may be explained as due to the mutual interaction of the molecular magnetic forces and their varied degrees of control by the field, saturation being the last phase of an extreme but slightly unstable equilibrium. When the magnetization is reversed, the molecules turn over, pass through an intermediate temporary stage of heterogeneity or instability, in which the movement is "mechanically irreversible" and hence produces heat which is lost. With these additions and modifications, Swendenborg's supposition may now be accepted.

Through the developments of magnetic and electric science we may also submit to a test the hypothesis that there is a perpetual circulation of subordinate fluid particles within particles of a larger order, or that there can be a perpetual motion within matter without loss of energy. If instead of an alternating magnetic field, a rotary field be employed, and one of sufficient strength (about 21,000 units of magnetic induction per square centimeter) to rotate all of the magnetically revolving molecules simultaneously without disturbing their relative configuration of parallelism and magnetic saturation, no hysteresis loss is experienced. This experiment, which may be performed upon an iron bar, demonstrates that the continuous rotation of the magnetic medium around the elementary molecular magnet is maintained without loss of energy.

The "electrons" of G. Johnstone Stoney, (see the "Transactions of the Royal Dublin Society," 1891, vol. iv, p. 583), are revolving within the atom with tremendous speed. So long as the revolution is uniform there is no "heat" in the ordinary acceptance of that term, and no loss of heat by radiation is produced. But let the regular internal motion be disturbed in any way—by electric discharges, or by mechanical (thermal) impact—and at once the ether is set flying, carrying with it a perfect picture of the original

perturbation. A perturbation, whether fundamental or a harmonic, must have some relation to the periodicity of the electron.

The analogy of this internal atomic structure to the theory propounded in the "Principia" will be at once evident. Swedenborg conceived of life and motion in the interiors of the atom, where before had been only a blank wall of nothingness; and with experimental evidence to modify, complete, and control his idea, it was capable of becoming a reality. This evidence which is now forthcoming, adds myriads of details, enriching his conception in a way that he could not have surmised, altering it essentially, but demonstrating his fundamental proposition, that the interiors, which are nearer to the Infinite, partake more fully of an infinite variation of modes. Every development of spectroscopic science but adds to the marvels of atomic structure.

To illustrate, let us take the periodic revolution of an electron (or perhaps of a ring of electrons) within the atom of titanium which furnishes the green line in its spectrum having a wave-length of 0.5035921 micron, and (calling the velocity of light $2.999 \times (10)^{10}$ cm. per sec.) a frequency of 595,521700,000000. ethereal vibrations per second, agreeing with the periodicity of the electron's revolution. Subjected to a magnetic field of 17,500 gaussess, the electrons, whose revolutions may be either right-handed or left-handed in respect to the field, are divided into two groups, one of which has its motions retarded, and the other accelerated by precisely the same amount. The result is that there are now two lines in the spectrum with frequencies of

595,494700,000000. vibrations per second,

595,548600,000000. vibrations per second,

instead of one line with an intermediate frequency. This phenomenon is known as the Zeeman effect. The change is very small on account of the enormous speed of revolution of the electron which can be only slightly modified by even the most powerful magnetic field at our command. The effect is only temporary, for on removing the magnetic field, the equal and opposite modifications within the atoms are

mutually destroyed, and the frequency returns to its original and permanent value. What seems marvelous to us is that throughout the universe, in all places and at all times, the atoms of each substance, when the conditions are suitable, emit precisely the same luminous waves; that is to say, each electron has its definite velocity of a perpetual revolution, but the only difference between the luminescent electrons consists in their positions within the atom. Herein we have a confirmation of Swedenborg's doctrine that the primal motion is a perpetual circulation in the interiors of matter.

Sir J. J. Thomson, to whom we owe the first actual demonstration of the reality of the electrons, or Thomsonian "corpuscles," found that the mass of an electron is about $1/1700$ of that of a hydrogen atom. (See his "Conduction of Electricity through Gases," 2d edition, 1906, p. 160, art. 78.) Now the ultra-violet spectrum of hydrogen is exceedingly rich in lines. Professor Th. Lyman, investigating Schumann's "second" spectrum of hydrogen beyond wavelength 0.185 micron, in which the lines show no broadening, even at high pressures, found three hundred and fifty-seven lines between wave-lengths 0.12283 and 0.16746 micron with no indication that the series was anywhere near its end. If we assume that each hydrogen atom contains about 1700 electrons,* and that each individual electron has an independent revolution (which is conceivable, although the arrangement of the electrons within the atom and their possible grouping into rings would have to be subjected to lengthy investigation), then a perfectly definite sequence and periodicity may exist in an equal number of spectral

*The phenomenon of the scattering of Roentgen rays in passing through the atoms apparently indicates that there are but few corpuscles in an atom; but Kaufmann's experiment proves that the mass of an atom is solely due to its corpuscles and must be equal to their sum: *i. e.*, the hydrogen atom being 1700 times as massive as an electron, should contain 1700 electrons. The discrepancy possibly means that the majority of the electrons are paired in opposing revolutions, and that only those not thus paired can scatter the X-rays.

lines. Some of the electrons appear to be satellites of other electrons, for the Zeeman effect brings out multiple lines of various complexity.

In this modern instance we have an approximate verification of Swedenborg's conception of different orders of revolving particles in which, he surmises, each new order may include a hundred or more particles of the preceding order. He says, "We can not tell what may be the number which at first has to be multiplied into itself." ("Actives of the third finite," *Principia*, part i, chap. vii, p. 207.)

Attempts to explain the valency of the chemist's atom and the relation between the properties of the atoms given by Mendeléeff's law, have resulted in the announcement by Sir J. J. Thomson that this can be accounted for on the supposition that there are concentric rings of regularly spaced electrons revolving in a common zodiacal plane; but in this case the number of electrons capable of stable adjustment is too few to account for the complexity of the spectral lines. Evidently a vast field for research has been opened by these discoveries. The remoter consequences of Swedenborg's simple but germinal principle are beyond computation.

One other consequence may, however, be noted. It is now found that in certain chemical changes an atom may emit from one to seven electrons. Free atoms which have thus temporarily parted company with a portion of their substance are called ions and possess certain new and remarkable properties, especially an avidity to combine with other ions which have gone through the reverse process and have acquired extra electrons. In certain other electrical and radio-active processes electrons which are called β rays are emitted from atoms. These move with a great speed, but still not, as a rule, with a velocity as great as that of light, whence we can not consider them to be ether particles, unmodified; but neither do they resemble the "first and second elementaries" with which the interiors of Swedenborg's air particles are supposed to be filled. (See "*Principia*," part iii, chap. vii, p. 227, vol. ii.) We do indeed regard them as the natural units of electricity, or *electric* atoms, and as such

they must have a very intimate relation with ether particles, but apparently with a distinction which awaits further explanation. This passing of his revolving actives into β rays of rectilinear path does not appear to have been foreseen by Swedenborg.

We give here for comparison a first view of slightly divergent classifications contained in the preliminary and the final work:

"MINOR PRINCIPIA"

First element—a third particle consisting of a surface of first particles inclosing second particles.

Second element—a fourth particle consisting of a surface of first particles, a nucleus which is a fifth particle, and intermediate active second particles.

Third element (ether)—a sixth particle consisting of a surface of fifth particles inclosing active second particles.

Fourth element (air)—a ninth particle consisting of a surface of eighth particles inclosing fourth particles and *bullae*.

"PRINCIPIA"

First element—a third finite consisting of a shell of first finites which inmost are simples, inclosing an aggregation of active second finites.

Second element—a surface composed of third finites, and an interior of actives of the first and second finites.

Ether—a surface of fourth finites inclosing first elementaries and *bullae*.

Air particle—a surface of fifth finites inclosing first and second elementaries and *bullae*.

The particles of the first and second elements are supposed to have a vortical form. (*Principia*, part i, chap. vi, n. 37 *et seq*; chap. ix, n. 7, p. 220.) In the "Minor Principia," the ether particles (sixth particles) are pictured as vortices (fig. 89). "A surface particle of the sixth kind flows spirally and forms polar cones, just as a particle of the third kind" (*Minor Principia*, n. 138, p. 478 of vol. ii). A different version is given in the larger work:

The ethereal particles are much larger than the first and second elementary particles; the two kinds of particles differ also in this respect, that the ethereal possess an internal space consisting not of actives but of elementaries, while the first and second elemen-

tary particles consist of pure actives, as we have before stated. Consequently the two kinds of particles are not similar in figure, but the ethereal are exactly spherical, while the first and second elementaries have poles or polar cones. (*Principia*, part iii, chap. v, n. 4, p. 201, vol. ii.)

The second supposition accords better with the properties of the ether for taking up every variety of vibration without modifying the vibratory form in the least, which requires perfect equality of form and elasticity at every possible angle. "The ethereal particles thus formed can subsist under any form of motion and with perfect aptitude to it." (*Ibid.*, chap. v, n. 6, p. 203, vol. ii.)

Let us compare Swedenborg's doctrine of the ether more critically with present conceptions:

The doctrine of the ether, or the phenomena caused by ether, may be reduced to the following statement. Motion diffused from a given center through a contiguous medium, or volume of particles of ether, produces light; for as a result of this motion the ether is reflected from every particle it meets with, and thus the form of an object is presented to the eye. (*Ibid.*, chap. v, n. 21, p. 219, vol. ii.)

This disagrees with the undulatory theory that has held sway in physics for nearly a century, but coincides with a new conception forced upon us by experiments which can only be reconciled with the doctrine of a light "quantum," or least particle of light, and by the supposition that the ether is *not* a continuous medium, supposed to be fluid, but yet possessing the obviously contradictory property of a constitution like that of an elastic solid.

The next two sentences are more difficult to reconcile with facts:

The central motion of the particles of the ether produces not only a rigid expansion of every particle, but also heat*, and if this

*A portion of energy of matter, including the kinetic energy of molecular motion which we now know as heat, resides as potential energy of strain in the universal medium (Swedenborg's aura); but we do not at present assign to his "ether" any office connected with heat.

motion be urged from the center to the circumferences, it causes light together with heat. If, however, it be urged from centers toward circumferences so as to become a local motion, but without the central revolution of every particle, it occasions light without heat.

If we suppose that by "heat" as a property of the ether is meant what used to be called "radiant heat," then it must be objected to the foregoing that there is no essential distinction between light and the invisible infra-red radiation which has sometimes, but incorrectly, been called heat. Every ray, whether visible or invisible, is capable of producing heat when absorbed by a material substance, and the heat generated is always exactly proportional to the energy of internal ethereal motion which it replaces. In this respect, the first sentence may receive an interpretation in agreement with fact, provided the distinction between luminous and non-luminous radiation, or so-called "light" and "heat," be abandoned, and provided the "central" motion be understood to mean that of the modified ethereal forms which constitute the interiors of matter, as in latent heat. There are passages in the philosophical treatises included in the manuscript of the "Apocalypse Explained" which give a different version more in accordance with our recently greatly expanded knowledge, but their consideration can not be attempted here. Very briefly, if one will accept the doctrine that "light" (or radiation) may be either visible or invisible, and that it is onward motion of ether particles, then light is truly a local motion of the ether "urged from [luminous] centers towards circumferences," but "the central revolution of every [ether] particle," and in particular that especial reciprocating rotation or vibration which gives to the light its quality, is never absent, while the energy, or heat-producing power is exactly equivalent to the radiant intensity.

The next sentence: "There are minute corpuscles which resemble a kind of effluvia, and which are so small as to be able to move only a volume of ether, but not a volume of

air *; these, if spontaneously moved, excite light to a certain distance," possibly refers to St. Elmo's fire, or the electric brush discharge, and if so, Swedenborg's "corpuscles" are very near those Thomsonian corpuscles whose flow in an electric current reminds us that Swedenborg speaks of "electricity which is the result of the motion of the third element or ether and larger corpuscles or effluvia that are able to move only the ether" (*Principia*, part iii, chap. v, n. 21, p. 221, vol. ii). The attribution of electric attraction to "a certain circular motion in the ether" (*op. cit.*), resembling that which produces the suction of an air whirl, also reminds us of a favorite explanation of Faraday's lines of electric force, which have been likened to vortex-filaments of ether. Though capable of these interpretations and often suggesting them, it must be admitted, however, that Swedenborg's explanations, in spite of their prolixity, are apt to be too vague for absolute identification with modern ideas. Remembering that nearly two centuries have elapsed since the "*Principia*" was published, and that we are only now getting confirmation of these partial previsions, it would be hypocritical to condemn them for being a trifle vague and, under the circumstances, the approximation to the verdict of the final experimental test is extraordinary.

When Swedenborg, like the Roman poet, invites us to view the magic mazes of the flying atoms, and when with a slow and somewhat ponderous logic he opens up a workable scheme of elementary relations, he is really leading us to the door of the modern house of molecular and atomic physics. The first experimental demonstration that the atom is compound was made in 1899 by Professor (Sir) J. J. Thomson through the memorable discovery that the cathode rays, projected from the negative electrode of a vacuum-tube, consist of corpuscles, or negative electrons, having a mass then supposed to be between $1/800$ and $1/1000$ that

*Here is a statement which contains the germ of truth in the "relativity" hypothesis. Certain orders of forms can act and react on each other; but there are still other forms so diverse that there is no interaction; that is to say the relativity is itself imperfect and should be admitted only when there is positive experimental evidence of its presence.

of the hydrogen atom (the fraction was later ascertained to be more nearly $1/1700$). As the dimensions of these minute bodies does not vary notably when the material of the electrode or the gaseous contents of the tube are changed, Professor Thomson concluded that atoms of every kind contain the same corpuscles in numbers proportional to the weight of the atoms. Thus if the hydrogen atom contains 1000 corpuscles, the atom of mercury (atomic weight = 200 times hydrogen) must include about 200,000 negative electrons. The final proof that the atomic mass is due solely to this atomic electric charge was obtained by Kaufmann.

Since each negative electron carries a permanent definite charge of negative electricity, or acts as if it were composed of a measured quantity of electric substance, the corpuscles repel each other, and can only be retained in permanent aggregation to form the atom by the overmastering attraction of a positive charge. The positive ion acts as though it contained such a charge, and since the diameter of the atom is much greater than that of the negative electron, the combination may, in one view, be likened to a solar system, a positive electron, which is much larger than the negative electron, remaining at the center like a sun, the dimensions of its sphere of attraction determining the size of the atom, while the negative electrons revolve or oscillate around the positive center and within its sphere of attraction, as Sir Joseph Larmor supposed to be the case. But this is not the only tenable hypothesis; for if the numbers of positive and negative electrons are equal, an arrangement of positive electrons into an encompassing shell seems more probable, and this, which is an arrangement proposed by Thomson, would agree with Swedenborg's hypothesis. In fact Swedenborg's figure 107 (p. 215, vol. ii), except as regards the equality of numbers, represents just such a dual particle (in this case an ether particle with a filling of first elementaries, but the plan of structure is the same in the larger atom). Just as the gravitational effect of a spherical shell of matter on an outside point is the same as if the matter were all concentrated at the centre of the shell, so for

many purposes it is indifferent which of these two views we take. Regarding the active negative electrons as the elements of a circular electric current, the passive and elusive positive electrons have an analogy with that static electrification which always seeks the surface, and this analogy favors the Swedenborgian theory of the atom. We may note also that the final outcome that *matter consists of nothing but electricity* is entirely in agreement with Swedenborg's thesis which may be paraphrased as equivalent to a succession (in derivation): energy, magnetism, electricity, matter.

The electromagnetic theory of light, derived from the study of the electromagnetic field, as represented in the equations of Maxwell, or of Hertz, remained incomplete until some means could be imagined to represent the connection between matter and the ether in the emission and absorption of light. This connecting link has now been supplied, at least in part, by the theories of the Dutch physicist, Lorentz, and their verification through the remarkable discoveries of his pupil, Zeeman. I quote from a memoir by Lorentz:

Charged particles will be regarded as being made of ponderable matter to which forces can be applied; however, I shall suppose that in all the space occupied by a particle there is also found ether, and even that a dielectric displacement and a magnetic force, produced by an external cause, can exist in this space as if ponderable matter were not there; this last is then considered as completely permeable to these activities.

This supposition which is a good example of the trend of present-day speculations, accords in a general way with Swedenborg's hypothesis that ponderable matter is formed out of more subtle substances of several orders, and that diverse motile forms may interpenetrate with very little interference. He explains this property by noting that the actives "do not constitute any real surface, but only one that is apparent and figured out by motion. Surfaces of this kind may be without number, for there is between them

no conjunction by contact; hence the surface of one may be carried through the surface of the other. Innumerable surfaces may, as it were, flow across one." (*Principia*, part i, chap. v, n. 17, p. 145.)

We have known for some time that, in a general way, the most complicated luminous motions can take place in the same volume of space without any interference whatever, except under very special circumstances when particular oscillations are either re-enforced or annulled. If it is necessary to consider a corpuscular aspect to the phenomenon of light in addition to the phases of complex transverse vibrations or oscillations, we can not suppose that the ether particles (or what is more to the point, their attendant magnetic fields) are so minute and so widely separated that they never come in contact, because under the right conditions of exact equivalence of phases and vibratory modes, opposite phases can completely interfere. Consequently, it appears that ether particles may pass through each other without interfering, except under rare and peculiar conditions. The substantiality of an ether particle is therefore of the same order as that of a wave which can cross another wave without losing its own motion, that is to say, both the ether particle and its oscillation are modes of motion in an antecedent medium. Hence it must be admitted that the theory of light can not dispense with a universal medium, even if light be corpuscular; and thus Swedenborg was right in saying that there is a first universal element (though it now seems probable that this universal atmosphere filling all space is his second or magnetic element) by means of which light passes from star to star, while at the same time he teaches that light is a phenomenon of undulation in a corpuscular ether which does not fill all space. Thus what at first sight appears contradictory is found to be essential to a consistent theory.

The phenomena of light call for a medium which is absolutely the same everywhere, though not at rest relatively to the earth. The ether in immediate contact with the earth does not fulfil this condition; but the magnetic element com-

plies with the desideratum, and also supplies the essential magnetic component of the luminous motion, provided the supposition of a greater vortical whirl in the direction of the planetary revolutions and with planetary velocities be abandoned. But astronomy has already demonstrated the fallacy of Des Cartes' hypothesis; and this unfortunate blemish, inherited from Des Cartes, being removed from Swedenborg's system, the way is clear for an oscillating ether particle, or light quantum, which is free to move through an isotropic universal magnetic medium with no interference or variation of speed induced by the medium itself. Nor will the light quantum set spinning through space by the original electronic oscillations be deviated from its course in passing through the shell of electric ether attached to the earth, although there must be some slowing down of the onward motion, since the drag of the ether which is attached to matter and moves with it affects the velocity of light sensibly as shown in theory by Fresnel, and demonstrated experimentally by Fizeau. This in fact is what constitutes atmospheric refraction. The ether drag has been demonstrated with the greatest exactness by Michelson and Morley who divided a beam of light between columns of water moving in opposite directions and measured the change in the light paths by interference methods.

Coming now to an entity with which the ether particle is most intimately associated and which appears to differ from it in mode rather than in magnitude, the researches which have been conducted on the cathode rays in a Crookes' tube give for the quotient of the electric charge carried by one of these particles, divided by its mass, the same value that has been found for those electrified particles which revolve in orbits within the atoms and whose perturbations in the magnetic field are studied by means of the Zeeman effect. Here it becomes necessary to modify Swedenborg's statement that an air particle contains the first and second elements which take the place of the actives of the primitive particles and give those qualities of internal motion on which latent energy depends. For while we may believe

that the electrons, like the ether particles, have been formed from the universal magnetic medium, they are distinguished from this medium by the impressment of a peculiar and extraordinarily permanent mode of motion *by which alone they differ from ether particles*. 'When passing freely through space as a cathode ray, the electron is deviated by a magnetic field, or large vortical flow of the magnetic element, but always remains distinct from that element. Light is not thus deviated. Moreover, the electron is now known to owe its inertia entirely to the electromagnetic field which it produces in the surrounding magnetic medium. While, therefore, the electron is always a part of the magnetic medium, and this not in the sense that it is a minute portion of the general medium circumscribed by a boundary, but in the much more extensive conception that its existence depends upon a widespread movement of indefinite extent in surrounding space, it nevertheless remains true that the electron is discreted from the general medium.

As to the nature of the motions which constitute the electrons, the figures obtained by Swan ("Stress and Other Effects Produced in Resin and in a Viscid Compound of Resin and Oil by Electrification," by J. W. Swan, F.R.S., Proc. Roy. Soc. London, vol. 62, p. 38, 1897) suggest that positive electrification is a vibratory motion of the ether extending in spherical waves around a center of electrification and producing attraction by modes similar to those of Bjerknes' pulsating drums; while the negative electron is the actual flow of a volume of ether in a self-contained vortical movement.

The electric field presented by the surface of an electron is a million-million times as great as any which can be produced experimentally. This results from the exceedingly minute size of the electron and from the extraordinary electric concentration, since electrification increases as the inverse square of the radius of a spherical body. This again is in agreement with Swedenborg's assertion that the more minute entities in the creative sequence are nearer to the infinite source of power. Their activities are said to flow

"almost in an instant," and they are, as it were, present almost simultaneously in all parts of their spaces.

One of the beauties of the newer corpuscular theory of atomic constitution is that there is no longer need of speaking vaguely of "latent" or "potential" energy, but the forms of energy hitherto so designated may now be recognized as appertaining to the kinetic energy of the electrons; and dynamics is resolved into a study of the kinematics of the electrons and the distribution of electromagnetic inertia. Owing, however, to the invariability of the electronic charge, it is necessary to suppose that the electron is a highly resistant body, hardly capable of deformation, and certainly not expansile and contractile within wide limits, but of constant dimensions. This apparently requires a further abandonment of Swedenborg's position that all of the orders of particles antecedent to water are highly elastic, at least in the sense of being highly expansile. The ether particle, however, must be exceedingly elastic, and even if it is not indefinitely expansile, its sphere of electromagnetic inertia during luminous propagation must interpenetrate other similar spheres, or there would be no such thing as interference of light. The vibratory part of the luminous motion may consist in a deformation of the particle which by recoil of internal elasticity passes to the opposite phase. The accompanying inertia is wholly due to rotation of the magnetic element.

Swedenborg's doctrine of light may be further confirmed by the following considerations: The Roentgen rays have been proved to be corpuscular by the experiments of Bragg, described in his "Studies in Radio-activity," yet their relations to light are most intimate. In 1907, Dr. J. M. Adams produced a species of spectrum from these rays, though not by means of refraction (*American Journal of Science*, ser. 4, vol. xxiii, p. 91). In this the sorting was accomplished by first separating the productive cathode rays according to their swiftness. Aluminum was found to transmit the Roentgen, or X-rays, which correspond to the swifter cathode rays and are therefore presumably of short wave-

length. Copper transmits a middle region. There are also many other phenomena which agree in assigning to the X-rays a quality analogous to color. Thus an X-ray tube which gives out "soft" rays in abundance causes much more intense fluorescence in barium platinocyanide than in calcium tungstate; but tubes which give out very "hard" rays leave aluminum residual rays which are presumably of short wave-length and which produce strong fluorescence with calcium tungstate, but not with barium platinocyanide.

The atomic obstruction to the mechanical impact of helium atoms, or α rays, emitted from radium, is proportional to the square root of the atomic weight of the obstructing atoms; but the absorption of secondary X-rays from tin in passing through equal weights of oxygen and silver (per unit surface) is more nearly proportional to the squares of the atomic weights; and this indicates that these absorptions are not purely mechanical, but that they have a selective quality, certain wave-lengths being picked out by each absorbent while others pass freely.

This is shown still better in the following mass-absorption coefficients (k):

Source of secondary X-rays =	Chromium	Nickel	Silver
k for magnesium	126.5	51.8	2.2
k for iron	103.8	314.	17.4
k for tin (approximate)		3200.	

The meaning of the figures is that, for example, secondary X-rays from silver are reduced to one-half in passing through an iron sheet weighing $0.7/17.4=0.0402$ gram per sq. cm. Wide variations are shown here both in absorbent and emissive quality, and such as we are accustomed to associate with the selective absorption and emission of variously colored light.

Furthermore, an X-ray corpuscle oscillating at a given rate and having an ascertainable penetrative power denoted by the degrees of its "hardness" on a Benoist radio-chromometer, can produce a β ray, or free electron, of definite speed, when received by a particular kind of matter capable of effecting the transformation. The energy involved in the

change is not abstracted from the atom, which appears to act as a catalytic agent, exerting a power of choice, but without giving up any energy of its own. Hence we have an instance of the formation of matter — the β ray — out of ethereal energy — which is the X-ray — and the process is a reversible one. Here, also, in the production of X-rays by impact of cathode rays on an anti-cathode, there is no wasting of material (if the anti-cathode be thoroughly protected from excessive heating by means of a water-cooling arrangement), but the conversion of the swiftly-moving electrons of the stream from the cathode into oscillating ether-particles, having the velocity of light, is immediate.

This, or something very much like it, is also the final conclusion at which Professor W. H. Bragg arrives in his "Studies in Radio-activity," where he says:

The X-ray phenomena suggest to us that an electron of given energy may be converted into a light-quantum of equal energy and *vice versa*, that the chance of either conversion is a function of the energy and depends also on the nature of the material which is required to effect the conversion, and that, in consequence, radiation of a certain composition must exist in equilibrium with a given form of electron movement such as the thermal agitation of electrons in a metal. If investigation from this point of view proves successful, we shall, I think, be guided and spurred on towards some great idea which will reconcile the old antagonism between the corpuscle and the wave.

FRANK W. VERY.

[TO BE CONTINUED]

A LIFE OF JESUS LITTLE KNOWN.

IMAGINE the interest which the Christian world would feel in the discovery of a new Gospel; another record of the Lord's life on earth more full than the records of the evangelists, entering more deeply into the secrets of that life, and telling many things which they leave untold. Imagine the interest in such a Gospel, if one of undoubted authenticity should be discovered. It would be read not only in our churches, but in our homes. It would be reprinted in the daily papers and sold upon the streets. It would furnish exhaustless themes for sermons; it would be the subject of earnest conversation everywhere. The Christian Church would find a new impulse of life, for with the new knowledge of the Lord would come a new quickening of desire to live the life that is from Him.

Such a new Gospel is discovered, or rather is revealed, by the opening of the deeper meaning of the Old-Testament Scriptures, which shows them all to be about the Lord. There must follow, with all who love the Lord, a new interest in entering understandingly into the story of His life, and a new earnestness in following in the way of life with Him.

Notice the abundant testimony of the New Testament itself to the fact that the Old Testament is about the Lord. There is the Lord's own saying to the Jews: "Search the Scriptures: for in them ye think ye have eternal life; and they are they which testify of me. . . Had ye believed Moses, ye would have believed me; for he wrote of me." There is the experience of Easter day, when the Lord joined two disciples who were walking into the country, talking sadly of the things which had just occurred. And He said, "O fools, and slow of heart to believe all that the prophets have spoken: . . . And beginning at Moses and all the prophets, he expounded unto them in all the scriptures the things

concerning himself." And later that same day He came to the disciples gathered in Jerusalem and spoke to them of the things written in Moses and the prophets and the Psalms concerning Him. He before had said that He came not to destroy the law or the prophets, but to fulfil; that one jot or one tittle should in no wise pass from the law till all was fulfilled. "The testimony of Jesus is the spirit of prophecy," says the Book of Revelation. John's Gospel declares that He was the Word made flesh.

But this testimony is general. There is other testimony in the Gospels declaring the relation of definite parts of the Old-Testament Scripture to the Lord, and in many cases indicating the period or phase of the Lord's life to which the Scripture applies.

Many times in the Gospels—more times than we realize—it is said of some event of the Lord's life, "That it might be fulfilled which was spoken by the prophet," and a passage of Old-Testament Scripture is quoted. We do well to notice carefully such references of the Gospel to the Old-Testament Scripture, to turn to the Old Testament and read the chapters or the Psalms referred to; for the reference shows that the Scripture cited belongs to the experience of the Lord's life which the Gospel is relating. In effect, it says, Insert here the Old-Testament Scripture; it adopts the Old-Testament passage and makes it a part of the Gospel at this place. There is no incident of the Gospel which the Old-Testament Scripture does not make more full. It was not till the last hours of His life on earth, that the Lord, in connection with such a reference to the Old Testament, said, "For the things concerning me have an end."

Note a few familiar examples: Remember the day in the synagogue in Nazareth, when the Lord stood up to read: "And there was delivered unto him the book of the prophet Esaias. And when he had opened the book, he found the place where it is written, The Spirit of the Lord is upon me, because he hath anointed me to preach the gospel to the poor:" and more of the same tender promise. And He closed the book, and sat down and began to say unto them,

"This day is this Scripture fulfilled in your ears." Here is a particular chapter of Old-Testament Scripture, the sixty-first chapter of Isaiah, which the Lord Himself declared to be fulfilled in His ministry of teaching and healing in the towns of Galilee. As another example take the reference to Isaiah in the eighth chapter of Matthew. We read here the story of a day of the Saviour's life, which was filled with works of mercy. Of this day it is said that "He cast out the spirits with his word, and healed all that were sick: that it might be fulfilled which was spoken by Esaias the prophet, saying, Himself took our infirmities, and bare our sicknesses." The reference is the fifty-third chapter of Isaiah: "Who hath believed our report? and to whom is the arm of the Lord revealed?"—the chapter which sets forth in such touching language the infinite condescension of the Lord, His wonderful sympathy and patience; which shows how completely He entered into all human states, sharing all human temptations and trials, and the severity of the conflicts by which He overcame and gained the power to bring deliverance to men. "Surely he hath borne our griefs, and carried our sorrows. . . . He was wounded for our transgressions, he was bruised for our iniquities: the chastisement of our peace was upon him; with his stripes we are healed." Insert this chapter of Isaiah at this point in the Gospel story as the cross-reference bids us to do. It reveals the Divinely tender sympathy in which the Lord walked among men, in which He received the sick and those possessed by devils who pressed about Him that day in Capernaum, and healed them. It tells how severe were the conflicts through which He gained the power to bring healing of body and soul to men. "He was taken from prison and from judgment: and who shall declare his generation? for he was cut off out of the land of the living: for the transgression of my people was he stricken." We learn at what cost of inner conflict and suffering He gained the power to help the afflicted people who came to Him for help. How much of inner conflict and laying down of life was involved in the apparently simple act of laying His hands upon the lepers, of speaking the word of command and casting out the devils!

Another example, where the Old-Testament reference not only makes more full the picture presented in the Gospel, but explains an incident, and with it several similar incidents which without the explanation are hard to understand. In the twelfth chapter of Matthew we read that great multitudes followed Jesus, and He healed them all; and it is added, "And charged them that they should not make him known." Why this charge not to tell of His wonderful works and make known His power? and why the charge presently to tell no man that He was Jesus the Christ? nor to tell of the vision of His glory seen on the mountain of transfiguration? The answer comes in one of these references to the Old-Testament Scripture, where more of the inner side of His life is told than was possible in the Gospels. "That it might be fulfilled which was spoken by Esaias the prophet, saying, Behold my servant, whom I have chosen; my beloved, in whom my soul is well pleased: I will put my spirit upon him, and he shall shew judgment to the Gentiles. He shall not strive, nor cry; neither shall any man hear his voice in the streets. A bruised reed shall he not break, and smoking flax shall he not quench, till he send forth judgment unto victory. And in his name shall the Gentiles trust." This reference, to a chapter of Isaiah, full of wonderful expressions of the Lord's patience with men and His tender accommodation of His power to them in their feebleness, explains the charge that they should not make him known. It was not the Lord's will to compel an outward acknowledgment from men by display of outward power or glory; He avoided such compulsion, tenderly winning their hearts and minds as it was possible to win them, but refusing to compel in a way which would do violence to the beginnings of real acceptance.

Take as one more instance of appeal to the Old-Testament Scripture, which greatly enriches the Gospel narrative, the several references of the Gospel to the crucifixion Psalm, the twenty-second. Not only do we read in two Gospels, Matthew and Mark, that the Lord uttered the first words of this Psalm in His agony upon the cross: "My God, my God,

why hast thou forsaken me?" Not only this, but by two other references this Psalm is brought into the Gospel narrative of the crucifixion. We read in Matthew's Gospel, "And they crucified him, and parted his garments, casting lots: that it might be fulfilled which was spoken by the prophet, They parted my garments among them, and upon my vesture did they cast lots." (Matt. xxvii, 35.) And again in John's Gospel, the same Scripture is quoted, and it is added, "These things therefore the soldiers did." (John xix, 23, 24.) The reference is to the twenty-second Psalm where these words occur. It tells us, in effect, to insert the Psalm at this point in the Gospel. Not only the opening words, uttered by the Lord upon the cross; not only this cry of despair and the saying about the parting of His garments belong to the Gospel at this point, but the whole Psalm, which we see plainly as we read it. "All they that see me laugh me to scorn: they shoot out the lip, they shake the head, saying, He trusted on the Lord that he would deliver him; let him deliver him seeing he delighted in him." It is the voice of the priests and elders mocking the Lord upon the cross. And read on in the Psalm: "They pierced my hands and my feet. I may tell all my bones: they look and stare upon me. They part my garments among them, and cast lots upon my vesture." The whole Psalm belongs to the hours upon the cross, and it makes the Gospel narrative so much the more full. It tells not only the words heard by those standing by the cross, but other words of unspoken prayer. It reveals as no Gospel does, the desolation of that last trial, the loneliness of the combat with all the hells.

But perhaps the greatest value, the greatest charm, of this Psalm as an enrichment of the Gospel narrative appears as we read on to its close. For the sad tone of the Psalm changes; it becomes confident, it becomes triumphant, even joyous; it tells of victory, and of blessing to all the ends of the earth in all time to come. "For he hath not despised nor abhorred the affliction of the afflicted; neither hath he hid his face from him; but when he cried unto him, he

heard. . . . All the ends of the world shall remember and turn unto the Lord: and all the kindreds of the nations shall worship before thee. For the kingdom is the Lord's: and he is the governor among the nations. . . . They shall come, and shall declare his righteousness unto a people that shall be born, that he hath done this." This, too, belongs to the story of the cross, this victory, this triumph, this strength from the assurance of blessing to all the ends of the world and to generations yet unborn, which no one of those standing by the cross, whether friend or foe, could know.

We may sometimes have wondered when we have read of the Lord's walk with two disciples to Emmaus on Easter Day, what Scriptures they were which He opened to them, which made their hearts burn within them and lifted their load of sorrow, when their Lord had been condemned and crucified. Ought not Christ to have suffered these things, He asked, and to enter into His glory? "And beginning at Moses and all the prophets, he expounded unto them in all the Scriptures the things concerning himself." They may well have been Scriptures like this Psalm, which tell of the trial which He bore and the laying down of life, but lead us through the hardship and the sorrow to the victory and the joy—through the loss of His outward presence to the joyful realization of the risen and glorified Lord, with us forever with all power to save. If the hearts of the two disciples burned within them as the Lord talked with them by the way, and opened to them the Scriptures, so may our hearts burn as the story of His life is opened to us in these same Scriptures, revealing deep things of His life, His inner thoughts and feelings, His emotions of sorrow and of joy, and especially the victory and the joy prevailing over all sorrow, which were unknown to His disciples, even to those who knew Him best.

No part of the Gospel story contains more references to the Old-Testament prophecies than the chapters which tell of the Saviour's birth and childhood. There are five such references in the first two chapters of Matthew; to prophecies which speak of the virgin birth, of Bethlehem

as the birthplace of the King, of bringing the Child out of Egypt, of Rachel weeping for her children, and the prediction, "He shall be called a Nazarene." All these passages of Old-Testament Scripture are connected with the story of the Lord's birth and the first years of His earthly life, where the narrative is otherwise so meagre. The deeply hidden things of the Lord's coming and of His infancy could be little known to the disciples, and could hardly be told in direct narrative, but they are told in the Divine way even to every detail. Do we wish that the story of the Lord's coming were more full, of the process by which He clothed His Divinity with humanity and dwelt among us? that the Gospel told us more of His infancy and boyhood than the brief mention of His life in Nazareth and the visit to the temple at twelve years? It is all told, the inner story of these first years, and of all His life. And these references of the Gospel, "that it might be fulfilled which was spoken by the prophet," tell us to find it in the Old-Testament Scriptures. "Search the Scriptures," the Lord Himself said, "for in them ye think ye have eternal life; and they are they which testify of me." It is because the Scriptures do everywhere testify of the Lord, because He is in them in every line and word, that they have for us comfort and strength; that we may search them and find eternal life.

In Moses and the Prophets and the Psalms, the Lord opened to the disciples the things concerning Himself. This suggests a convenient division of the subject for more careful and systematic study. "In Moses" we have the first five books of Scripture, and with them we may group all the history of the Old Testament. One simple thought may sufficiently illustrate the relation of the Old-Testament history to the Lord; the thought that the patriarchs, Abraham, Isaac, and Jacob, the judges of Israel, the prophets, and the kings, David and Solomon, and the rest, all represent the Lord, and that the history of these men describes in parables the experiences of His Divine-human life. It is the general recognition of this fact, which has led to the effective use of Old-Testament tableaux in connection with the Gos-

pel story in the Passion Play of Oberammergau. The thought is enough to open a new light and a new power to us in the Old-Testament histories. They become unspeakably holy. As we read them they draw us into closer and more living relation with the Lord. Let us now attempt only in the simplest way to suggest this representative character of Old-Testament persons. In the doctrines of the New Church the subject is developed in detail, and in the case of Abraham, Isaac, Jacob, Joseph, David, and others it is shown with great fulness what faculties of the Lord's human nature, and what experience of His human life, each represents.

The blessing spoken to Abram and repeated to Jacob: "In thee shall all families of the earth be blessed," was more truly spoken of the Lord.

If we would learn more of the Lord's tenderness towards men, of His infinite kindness to the unthankful and the evil, and His salvation for every soul in which is the least particle of good, read the prayer of Abraham for Sodom—that the righteous might not perish with the wicked. "If there be fifty righteous in the city," he prayed, "if there be forty-five, forty, thirty, twenty, ten." This was the prayer of the Lord as He walked among men and saw them carried away by worldliness and evil. No love but His was at once so strong and so gentle that it could check the wickedness of the world without destroying the good. No love but His could find the spark of heaven in men's souls and save it alive.

Jacob's vision of the ladder is another wonderful lesson of the Lord. The Lord, at once God and Man, was the ladder set up on the earth whose top reached to heaven. By Him every one who will may ascend from earth an angel, and by Him heaven's best blessings are brought down to us below. Almost in the words written concerning Jacob's ladder, the Lord said of Himself, "Hereafter ye shall see heaven opened, and the angels of God ascending and descending upon the Son of man."

Again, we read the story of Joseph, well beloved of his

father but hated by his brethren. Joseph came seeking his father's flock. So did our Lord come into the world to seek the Father's sheep, and to speak to His brethren a message of the Father's love. But Joseph's brethren hated him and conspired to slay him, because he told them his dreams in which they bowed down to him. So did men conspire against the Lord, and took up stones to cast at Him when He told them of His Divinity. They sold Him too for money to the Gentiles, and parted His garments, as the brethren sold Joseph and sent his blood-stained coat to their father. But still Joseph dealt kindly with his brethren, and though unknown by them preserved their life; and could not restrain his tears, so earnestly he longed to make himself known to them, and to tell them of his forgiveness and his love. How true was all this of our Lord! Though hated and despised He still was giving His life for men, patiently working for them in ways which they knew not, and longing for the opportunity to make them know His love. How precious this simple story of the Old Testament becomes when we know that it is a story of our Lord, and what a new depth of tenderness it adds to the Gospel record of His life!

We read the story of Samuel, given by the Lord, who was weaned by his mother and brought as a child to the tabernacle in Shiloh to serve the Lord. It is a charming and touching story, and far more so when we know that Samuel represents the Lord in some aspect of His Divine-human life. The Lord was the child given from above in the world's hour of deepest sorrow. From His earliest years He was weaned from His mother, as He felt His Divine origin, and that although He was in the world He was not of the world. Mary could give Him natural birth; she could wrap Him in swaddling clothes and minister to Him in external ways, as Samuel's mother made him a little coat and brought it to him from year to year. But from the first she began to wean Him, and to look upon Him with holy wonder, pondering the shepherds' words, and the Child's own question, "Wist ye not that I must be about my

Father's business?" It was the Lord Jesus who, from tender years, began His service at the tabernacle—began indeed to make Himself a tabernacle in which God could dwell with men. As a child He learned in the silence and darkness of the world's night to listen to the Divine voice and to obey it; and as Samuel, in the morning, opened the doors of the tabernacle, so did the Lord open the doors of the Divine presence, bringing morning to the world. It was not by chance, but to remind us of the deeper meaning of this story, that it was written of Samuel, almost in the same words as of the Lord, "And the child Samuel grew on, and was in favor both with the Lord and also with men."

Again, we read of David who, as a lad, was called from the sheep folds and anointed king. The Lord was the true David of Bethlehem. He was the man after God's own heart. He was the David who continued to be promised by the prophets, long after King David lived and died. The Lord was the good Shepherd who, even as a child, cherished in His heart the lambs of perfect innocence, and with courage defended them against the lion and the bear of childish passions. The Lord was anointed King as He advanced in youth from perfect innocence to perfect strength, and began to rule His own life in the power of Divine truth and to make the influences of evil which had oppressed men, tremble. David's first battle, with the Philistine giant, is a wonderful picture of the Lord's early conflicts with evil. David went down into the valley to meet Goliath, armed with his shepherd's sling and five smooth stones from the brook. The armies stood watching on either side, knowing that their fate depended upon the result of the single combat. It is a most impressive picture, the shepherd lad meeting the proud warrior, trusting in no earthly armor but in the name of the Lord of hosts. And how it grows in grandeur when we know that the picture is really of the Lord, fresh from the innocence of His Divine childhood, trusting in the power from on high, going forth alone to fight the battles on which the fate of all mankind depended! The whole world and heaven itself stood dismayed and help-

less before the giant power of evil. The Lord alone took the whole battle upon Himself and gained a victory which earth and heaven might share. David slinging his smooth stone at the giant, is the Lord as a boy,—and He was always a child in innocence,—meeting the tempter with a simple Divine truth from the stream of the Holy Word: “It is written, Thou shalt not.” Can we admire David’s courage? and have we not a still deeper admiration for this courage of the Lord? And we are not idle spectators of His battle, but our own life, depends upon His victory. As the host of Israel shouted and joined in the pursuit, so we may be victorious in His strength.

We read of Moses, how he built the tabernacle in the desert after the pattern shown him from heaven. We wonder at the minute details of its materials and form. We read again of the building of the temple by Solomon of the choicest materials of the earth. How holy does all this become when we know that we are reading of the tabernacle and temple which the Lord was building in His Divine-human life; a tabernacle of God with men, in which He could dwell forever with them; a temple which men could not destroy. How full of meaning Solomon’s prayer becomes at the dedication of the temple, when he prays for all the people wherever they may be, in whatever distress, that they may find relief, every one according to the needs of his own heart, when they turn towards the temple! It is the Lord’s prayer that all may learn to know Him in His Divine Humanity and find forgiveness for every sin and strength for every duty. While we read, the tabernacle in the desert and the temple at Jerusalem fade away. We see no temple, but the Lord God Almighty and the Lamb.

Read of the prophets Elijah and Elisha, how they passed to and fro over the paths of Galilee proclaiming the true God and doing mighty works by His power, but how they were rejected by Israel, so that Elijah found a home with the widow of Zarephath, and only Naaman the Syrian came to Elisha to be healed of leprosy. And all this ingratitude and hardness of heart was prophetic of the Lord’s own life; as

He told the men of Nazareth. He too walked in the paths of Galilee blessing the people's bread, imparting to them both natural and spiritual life. But with those who should have loved Him best there was no place for Him to lay His head; He found a welcome only with the simple and the Gentiles.

Read where you will in the Old-Testament history, and everywhere, sometimes more plainly and sometimes more obscurely, you read of the Lord Jesus Christ and His redeeming work. It is not by chance that some of those stories of the Bible which we loved best as children are now those which speak to us most plainly of the Lord. It is the Lord in them which makes them precious to the children. We ought to treasure that childlike reverence until we learn its meaning, until with maturer understanding we clearly see the Lord, where, as children, we felt His presence. So Moses wrote of the Lord.

"Moses and the prophets, and the Psalms." Turn now from the historical to the prophetic Scriptures. Here the ray of Divine promise shines out of the darkness of the later days of Israel and Judah, even more brightly and definitely, pointing not now to a vague hope to come from Abraham's line, but to a child to be born of a virgin; who should come from Bethlehem in the land of Judah; who should be called as a child out of Egypt; upon whom the Spirit of Jehovah should rest, to make Him of quick understanding; who should be heralded by a cry in the desert, which should turn the heart of the fathers to the children, and the heart of the children to their fathers; who should come as a light into the darkness of Galilee, by the way of the sea, beyond Jordan; who should be anointed by the Spirit of the Lord Jehovih, to preach good tidings unto the meek, to bind up the broken-hearted, to proclaim liberty to the captives, and the opening of the prison to the bound; who would be greeted as King, though He came lowly and riding upon an ass, and upon a colt the foal of an ass; who would be hated without cause; who would be despised and rejected of men, would be wounded for our transgressions

and bruised for our iniquities, would pour out His soul unto death and be numbered with the transgressors; who would swallow up death in victory and wipe away tears from off all faces; who would lead captivity captive; who would bear the government upon His shoulder, and of the increase of His government and peace there would be no end.

This voice of prophecy breaks out continually from the shadows of Israel and Judah, from the story of their decline and captivity, with hope and consolation not for that people only, but for the world. In very many instances, as we have seen, the prophecies are cited in the Gospels, and in not a few instances by the Lord Himself, as fulfilled in His life. Not only did He read from Isaiah in the synagogue at Nazareth, and say, "This day is this Scripture fulfilled." He spoke of the three days and nights of Jonah in the whale's belly, or as Jonah himself says, in the belly of hell, as a type of His crucifixion and burial which also was typical of all His temptations. When the thought of deliverance from the trial came to the Lord in Gethsemane, He said, "But how then shall the Scriptures be fulfilled, that thus it must be?" And again on the same night, "For I say unto you, that this that is written must yet be accomplished in me. And he was reckoned among the transgressors; for the things concerning me have an end." Still more plainly than Moses and the history of Scripture, the prophets are speaking of the Lord, not here and there, but everywhere.

As we search the Scriptures to find the Lord, the whole Bible becomes transfigured with His brightness. Moses and Elias—history and prophecy—appear with Him in glory and speak of the experiences of His own perfect life. But even while we read, Moses and Elias are forgotten, and all mere human names. We are in a holy presence, and as we raise our eyes we see no man, but Jesus only with ourselves.

It remains to speak of the Psalms as songs of the Lord's life—"Moses, and the prophets, and the Psalms." And here we have not only the fact that the Lord opened to the disciples in the Psalms the things concerning Himself, but we have David's own testimony as recorded in the Book of

Samuel: "David the sweet Psalmist of Israel said, The spirit of the Lord spake by me, and his word was in my tongue." There is also the fact that we have already noted, that David represents the Lord, and the Psalms of David become the songs of the Lord's life, the expressions of His heart in times of conflict and of triumph. We have seen how plainly this is true of the crucifixion Psalm, the twenty-second, and how much that Psalm adds to the fulness and tenderness of the Gospel story. Passing from this Psalm to the next, is it by chance that we find the words of peace and of protection in death: "The Lord is my shepherd; I shall not want . . . Yea, though I walk through the valley of the shadow of death, I will fear no evil"? And still reading on we find the story of resurrection and ascension: "The earth is the Lord's and the fulness thereof . . . Who shall ascend into the hill of the Lord? or who shall stand in his holy place? . . . Lift up your heads, O ye gates; and be ye lift up ye everlasting doors: and the king of glory shall come in."

We think not of the man David, but of the Lord, when we read in the Psalms the professions of perfect innocence and faithfulness. Our thought is more with the Lord than with David as we read, "A Psalm of David. (And in the original this title is a part of the Psalm.) Lord, how are they increased that trouble me! Many there be that rise up against me." "A Psalm of David. Blessed be the Lord my strength, which teacheth my hands to war, and my fingers to fight: my goodness and my fortress; my high tower and my deliverer; my shield, and he in whom I trust; who subdueth my people under me." Even the cruelty and vindictiveness of some of the Psalms express the thoroughness of the Lord in His victories, making no compromise with evil. And when above two Psalms we read, "A Psalm for Solomon," it tells us that we read of the peace which followed victory, for the Lord. "In his days shall the righteous flourish, and abundance of peace so long as the moon endureth." "Except the Lord build the house, they labor in vain that build it. . . . it is vain for you to

rise up early, to sit up late, to eat the bread of sorrows; for so he giveth his beloved sleep."

The Psalms are songs; and songs are the fullest expressions of love. You know how affections are expressed in music; how our hearts are stirred by joyous or plaintive strains. You know how feeling is expressed and perceived in the music of the voice. There is music in heaven, we are told, which is affection itself sounding and affecting all hearts to their depths. When we know that the whole Word is written of the Lord; that Moses and the prophets and the Psalms, no less than the Gospels, tell the story of His life, we are prepared to learn that the great love of the Lord's coming, and the affections of His life in sorrow and joy, are expressed in fulness in the great song book of the Scripture, the Book of Psalms, which enfolded in the midst of the Scripture, beats like the warm heart of the whole. Even the names of musicians and of strange musical instruments, in the titles of the Psalms, will have interest when we are able to see in them indications of the phases of affection which the Psalms express.

All readers of the Bible know the tenderness of the Psalms, their appeal to the affections; their power to quiet fears and troubled feelings, and to inspire trust and courage. It is because the Psalms are Divine songs, are expressions of the Lord's great love, in which He came into the world, in which He met and conquered all temptation, and made blessed Christian life possible to men. "God so loved the world." This great love is expressed in the Psalms as nowhere else.

The doctrines of the New Church repeatedly and emphatically declare that the Sacred Scriptures are Divine in every line, and full of infinite light and power, not because of their letter, which is taken from the language, the knowledge, the experiences of men, but because of their spiritual and inner meanings which do not regard one nation or one people, but the universal human race, as it is and has been and will be; and what is still more universal, the kingdom of the Lord in the heavens; and in the supreme sense the Lord

Himself. In a very wonderful way the Sacred Scriptures make one with the Lord's life. "The Word was made flesh and dwelt among us." In the Old-Testament Scriptures the whole story of that life was told as it would be, even to its inmost thoughts and feelings; so fully so that when that life was lived it was but the fulfilling, the making actual of what had been written.

And this involves a very tender thought about the Word, that it was to the Lord an essential means in living the perfect life with men, and in doing His saving work. What was there written as perfect truth He made actual, and joined to the truth the love which made it living and filled it full with power. We value a copy of the Bible which has been the property of father or mother, or one whom we have loved. We value the worn pages, and the signs that the book has been often opened to certain Psalms and chapters of the Gospel; we love to think of the dependence of these strong men and women upon those pages of Scripture, and to realize that they were the secret of their strength; and so in a still deeper and more sacred way it adds to the value of the Scriptures to read them as the book of the Lord's life, to be taken by them into the inner secrets of His life, to go to the springs of His comfort and His strength.

The simple truth, that the Scriptures are all about the Lord, shows as nothing else does, the unity of the Scriptures, and makes of many books, written by many men, in different languages, in different places and at widely different times, one Holy Bible, one Word of God. "The Lord gave the Word, great was the company of those that published it." The Scriptures are one book from the Garden of Eden to the Holy City, especially because they are the book of the Lord's life, for they were never perfectly fulfilled, and can never be perfectly fulfilled except in Him. They are His sacred garment, with healing in its very hem. Outwardly they may be made of many parts, which irreverent hands may rend; but inwardly they are woven without seam, one perfect whole, one continuous, perfect story of His life.

But more than the transfiguration of the Word with new glory to our minds, when we know that it is all about the Lord; more than the unity that we find in the Scripture in spite of all that critics may do to rend it, when we know that it all relates to Him; more than these is the sense of the Divine presence in the Word when we read it all as the Lord's book and the story of His life. There is a wonderful interest in the history of the patriarchs, the judges, and kings, when we know that they are types of the Lord in His human life; there is wonderful interest in the prophets when we see in them not only predictions of the fact that the Lord would come, but revealings of the inner story of His life; there is wonderful interest and wonderful tenderness in the Psalms when we learn to read them and to sing them as songs of the fatherland, the national airs of heaven, as songs of the Lord's own life. There is power in their music, as in David's playing before Saul, to drive away the evil spirit, to refresh us and make us well.

As we read the Scriptures reverently as the story of the Lord's life with men, the reading is a coming near to the Lord; and the Scriptures become the means, as they were meant to be, of bringing the comfort, the light, the power of God into the lives of men.

The new Gospel is discovered—is revealed—and lies open for us to read; the Gospel that tells all that we need to know and can wish to know of the inner history of the Lord's coming and of His redeeming work. It will open more and more to teach of His life, and to bring us into closer and more vital touch with Him; that we may live from Him, and more abundantly forever.

WILLIAM L. WORCESTER.

"HOLY, HOLY, HOLY": A STUDY OF THE TRISAGION.

AND one of the Seraphim cried unto the other: and said: Holy, Holy, Holy, is Yehovah Zebaoth: the whole earth is full of his glory. (Isaiah vi, 3.)

THE perfectly natural tendency of the human mind to attach significance to the numbers three and four and their sum and product seven and twelve, has given this sentence from the prophet Isaiah an import which it might otherwise have lacked. And to the student of the inner verity of things it is of unusual interest to note how and why the human mind has been inclined to attach such significance to these numbers. For the world teems with trines that are so unmistakable, as to be scarcely worthy of enumeration here. Let me mention only a few. The fact that there are three kingdoms in nature, the mineral, the vegetable, the animal; that there are three dimensions in mathematics, length, breadth and thickness; and three dimensions in philosophy, space, time, and condition; and three senses of history, the past, present, and future; and three conditions of matter, the gaseous, the liquid, and the solid; these and a great number of others naturally inclined the normal thinking mind to give the number three its peculiar significance, which the religious side of the mind would see as "sacred" or "holy." This significance of sacredness, sanctity, holiness early attached itself to the number three, therefore, and in a perfectly natural way. Along the lines of this "perfectly natural way" the Divine Author of the Holy Word utilized this tendency of the mind to impress upon it this sense of sanctity, until the church in all its historic forms recognized the Divine Itself as a Divine Trinity, called according to the genus of the historic period, Father, Son, and Holy Spirit; or Osiris, Isis, and Horus; or Ouronos, Rhea, and Zeus;

or Jupiter, Neptune, and Pluto; and a large number of trines of personality. Thus this number became intimately and inseparably associated with Deity. It became a Divine number, and its essentials were compressed by the makers of language into the conventional term, "The Trisagion," which is Greek for the "Thrice Holy." And our text became the embodiment of the idea of the Trisagion.*

The thought in the modern form of symbology, as given by Swedenborg, is "that three signifies what is perfect, with reference to the Divine." The same thought he expresses in theology as a "Trinity of Love, Wisdom, and Power, residing in the One Person of the Lord Jesus Christ."

We may therefore briefly think of the Trisagion, or the "Holy, Holy, Holy" as standing for the Divine Itself.

This is the first and principal significance of the thrice repeated word.

When the student of symbolism looked back into older symbolic lore he met with another singular expression, called the Tetragrammaton, or the "Four-Written" or the "Four-Letter Name," being usually and popularly conceived as meaning the four letters used in writing the sacred name of Yehovah, namely, YHVH, on the ground of which four letters the so-called Higher Criticism has exercised that peculiar and rather boyish privilege of learned people of changing the spelling of familiar words. By the entirely useless exercise of this assumption of privilege, Yehovah becomes Yahve; Ormuzd becomes Ahuramazda; Ahriman becomes Angramayniu; and Amraphel—the shades of Cicero agreeing—becomes Hammurabbi. Cicero long ago ridiculed this tendency of the learned by his smiling allusion

* We should not lose sight of the Divine and spiritual cause lying back of this explanation from the evolutionary point of view, namely, that three attributes are essential to the holiness of God and the completeness of heaven, and actually exist in them,—love, wisdom, and use. This is the fundamental reason for the employment of the number three in the Lord's Word to signify what is holy and perfect or complete. Thus it is a revelation in the Word which is illustrated and confirmed by the evolution of thought in earthly observation and experience.—*Editors.*

to the deduction of "*Neptunus e nando*," to "get Neptune from swimming," because both words happened to contain an "N." For this reason I take the liberty of calling the exercise of this privilege a useless one, though it may be interesting and in some sense valuable. The "four-letter" idea seemed to satisfy that side of the human mind, which inclined naturally to the occult, the mystical. Hence the tetragrammaton drifted readily out beyond the confines of the organized church and took shape in the ranks of the magicians, the occultists, the Rosicrucians, the early "Freemasons," (rather a different organization from that known among us by this name to-day). The "Four Fold Name" became in very literal deed a "thing to conjure with," and appears in all the weird books old and new on magic and sorcery: in both the legitimate ones, so admirably set forth by Mr. Arthur Edward Waite in his large tome "*The Book of Ceremonial Magic*," and in the little illegitimate ones of which a whole school appeared in those days of peculiar race psychology, which lay between the regime of Andrew Jackson and the Civil War, when America was flooded with bold deceptions; and quite ordinary musicians, for instance, did not hesitate to set the name of Beethoven, Weber, and Schubert under the titles of the exceedingly mediocre pieces they produced. Those days saw the publication of a flood of occult literature, largely in German, comprising the so-called Sixth and Seventh books of Moses, and claiming to be two additional books written by Moses, but kept out of the canon of Holy Writ by the bands of Mystic adepts then holding forth in Egypt. In point of fact these books are ridiculous forgeries, an absurd collection of supposed "Tetragrammata," jumbled enough to set the mental teeth of the least fastidious on edge. Both phases of the subject go to show that there was fascination in the "Tetragrammaton" as well for the competent as for the incompetent mind. And it leaves us with the recognition in mind, that the "Trisagion" remained within the organized church, while the "Tetragrammaton" floated out of it upon the wider

reaches of the race mind. Within every magic circle appeared the square of the tetragrammaton beginning with the original square and ending in the Swastika,—Why? Who can tell? But to the student of symbolism there will instantly occur the significant combination of ideas which thus may be summarized. Three, signifies what is perfect so far as God is concerned. Four signifies what is perfect, so far as man is concerned. Hence the Trisagion remained in the church, which stood for God in the world, while the "Tetragrammaton" naturally floated out upon the general sea of race-mentality, because it stands for the perfection of man at large. To which the more advanced student of symbology added the further sentence, Hence man is represented by the "foursquare" of the Tabernacle, the Temple, and the Holy City, in which case the "Four Square" is actually interpreted as being the "measure of a man, that is, of an angel," and the tetragrammaton is evidently applied to the perfect man, even to-day, as of old, popularly called the "square man." And when the Divine and the human are thought of as *standing* side by side, the number seven, or the addition of three and four is used for the combination, while, if the Divine and the Human are thought of as *operating* side by side, the result is the product of three by four, namely, twelve. All of which, while not vital, is useful for the student of symbology to hold in mind, when he is trying to get at the fundamental factors at the bottom of symbolic numbers as used in all symbolic books, and more in our Holy Word than in any other.

So far the symbology of the text. The voice of the Seraphim expresses the Divine Itself, in its trinal aspect. Now, if we carry this trine downward from the Divine Itself, at the hands of the most enlightened of Seers, we come to the frequent statement, that "whatever is human about the three heavens, is the Lord in the Heavens." In fact, in its more transcendent forms, the statement is boldly given, that "the soul of Heaven is the Lord," and we are asked to think of everything perfect in the three heavens,

as being "the Lord in the Heavens." To the careful reader of Swedenborg this thought is altogether familiar. We are therefore permitted to say that the "Trisagion" applied to the heavens means the "Divine in the heavens" and the threefold manifestations of that Divine. Swedenborg calls the three heavens by the familiar technical names of the celestial, the spiritual, and the natural. He carefully elaborates the idea, that the actuating principle in the highest or celestial heaven is "Love to the Lord" and that the angels there express that love by loving their neighbor-angels "more than themselves." The dominating principle of the spiritual heaven is Wisdom, which interpreted by Swedenborg himself (in rather a startling way) is equivalent to the fact, that the angels of that heaven love their neighbor-angels "as themselves," which is the only rational definition of wisdom, Socrates, Plato, and an army of others to the contrary notwithstanding. The outer manifestation of this wisdom is an intelligence beyond words and an intellectual apprehension of the mysteries of God and the universe unexcelled.

The manifestation of Deity in the lowest or natural heaven is given in the word "Obedience." Those who cannot float in the depths of the Divine love in the celestial heavens, and those who cannot swim in the deep waters of the Divine wisdom in the spiritual heavens, can wade "a little out from shore" in the shallows of obedience, and in a humble love of service and delight in use, that even in its humility dazzles the sanely thinking Christian and seems to him quite a sufficient goal to work for.

Condense these sentences into one, and we have the fact that the Trisagion represents the manifestation of the Divine in the heavens as love, wisdom and power, or service, which latter transcription is more satisfactory in many ways.

Now take the third step downward, as one naturally would in studying the "trisagion." Step down from heaven as the body of which the Lord is the soul, down to the church, which is avowedly the "Body of Christ" on

earth. The reader is reminded that there are two orders of degrees, namely, the successive and the simultaneous; and that our great teacher in laying stress upon the doctrine of degrees lays equivalent emphasis upon the fact that degrees manifest themselves in two orders; that they are either simultaneous, infolded into one, or successive, unfolded one out of the other. If the student were left his choice he would think of spiritual things as predominantly in the simultaneous order, because in spiritual things the chief thought is the absence of time and space, and one can therefore not well think of spiritual things as unfolding one out of the other in process of time and through the geography of space: or, in other words, thinking of spiritual things, it is well to think of them as being simultaneous, without trying to think of them in time or into space. But thinking of natural things, in which time and space are accredited, and permanent, and unavoidable factors, we think of them as "successive;" one unfolding out of the other. If therefore the church on earth be considered as to the three manifestations of Deity here studied, we would naturally look for these three steps as taken in time and covering historic periods. But where could we make a legitimate trinal or threefold, or "trisagion," division in the life of the Christian Church? Without doing serious violence to any conception, it seems to be permissible to divide the history of the Christian Church into the three periods. Its Primitive State, beginning with the foundations of the Church of Apostolic days to the revolt under Luther. This is the first period comprising all we generally call the Roman Catholic Church, when there was no "protesting or Protestant" church. This will give us the second period as beginning with Luther and ending with Swedenborg. Between these two mental giants lies the valley of the Mediæval Church. And as Luther rose in rebellion against the paternalism and authority of the Papal Church, so Swedenborg rises in rebellion against the dogmatism of the Protestant Church. This shows these two giants to have been parts

of the great mindworld evolution, which the student of history is beginning to see dimly outlined against the background of material facts. And from Swedenborg dates the "New Church" differing from the Mediæval as that differed from the Papal.

Examine now the "dominant traits" of these three "churches." Evidently the dominant note of the Catholic Church is "obedience." The same dominant note that rings through the natural heavens, only with rather irritating echoes due to the inertia of matter and the tormenting twists of egotism. The Catholic Church, is the church of authority, of paternalism, and its children must "obey, obey, obey, first, last, and all the time." The Trisagion of the Catholic Church is "Obey."

Considered on the side of optimism,—and I can see no special value in the customary pessimism, which sees in churches only the undesirable,—it is evident that the Lord can, does, and did train many of His children into a healthy element of docile obedience and the love of unselfish service through the paternalism of Catholic Churchism and the paternalism of Monarchic Government, which is the civic equivalent of the papacy. If it were not so, He would not have allowed these forms of government, ecclesiastic and civic, to endure for so many years. Otherwise His Divine Purpose must have been wrecked, and such a thing is incompatible with Divine Providence. He could not have utilized the earth-structure of the Catholic Church for nearly fourteen centuries, if He had been unable to train by and through its paternalism (which we of modern days look upon with such suspicious irritation) a body of obedient peoplers of the heavens of obedience, of service, of humility, of perfect docility.

And next what is the dominant note of the mediæval church? Dogma, faith, belief, intellectualism, the earth-clogged and distorted shadow of that "wisdom" which is the Divine in the middle heaven. It is, of course, perfectly easy to see that this statement must be cautiously taken, lest

we drift into errors not sanctioned by Draper or Herbert Spencer. But the fact remains, that intellectualism is the dominant note of the middle church as it is the dominant note, in its purely Divine form, in the middle heaven. Dogma supercedes authority. The Church turns from a man, the Pope, at the centre of things, to the Word, a Book, at the centre of things. The State turns from the King, as a centre of monarchy, or empire, to the written or unwritten constitution as the centre of things, or to the "Constitutional Monarchy" in which the King becomes more or less of a figure-head and the people begin to rule themselves and their land by election, as in England.

It does not seem necessary to further dwell upon this. Viewed in combination with what goes before it seems evident enough that the second stage of the Church, its Protestant state, is equivalent as to its dominant note, with the same note in Divine purity in the middle or spiritual heavens.

Proceed now to the New Church. Allow the eye to sweep a little further afield than the ordinary denominational lines of those of us who have adopted that name as our ecclesiastic formula. Suppose we retain the original title given by Swedenborg, namely, the "Church of the New Jerusalem," for the denomination, as most of us by common consent have thus far done, while we allow ourselves the wider outlook for the name "New Church," and gaze abroad to see what the Lord is doing with His Church to-day. He is evidently wiping out denominational lines. There are no more martyrs burned on the funeral pyre to-day. The clergy in the large cities have ceased from preaching dogma and have gone to preaching the "moral life" or a system of ethics, which to many of us is not at all satisfying. But along side of this there has come a spirit of brotherhood upon the church. Men are uniting for—for what? We are still expressing it feebly, but what we are really doing is, trying to sink the good of the individual in the "common good." When vast armies of Churchmen combine and unite in giant movements for the "bettering of conditions" just

what does it mean? Beyond the possible insufficiency of its early manifestation; beyond the clumsiness wherewith we must needs begin these new movements; beyond the evident futility of much that is undertaken; beyond even the danger of lurking hysteria and the overdoing of good intentions; what is there in the vast "New Church" movement stirring through the Christian world, with its face set against drink, until the Southern States puzzle us with their prohibition legislation; against vice, with city after city recognizing the fact that the municipality must not close its eye to the traffic in immorality; against the flooding of the country with the vice of the Old World, and the consequent attention to the immigrant; against the white plague, moral and natural? Note the open air work, and the social service work, and the Men and Religion Forward Movement, and the thousand and one avenues into which the Church is pouring her forces through the gateways of both the ordained and the unordained ministry. Just what lies back of this "New Church" which the Father of us all is bringing about, upon the face of the earth, unless it be the larger service of love to the neighbor, that larger service which Swedenborg so ingeniously designates "loving the neighbor more than self," and which we have translated into our clumsier language of "sinking the consideration of individual welfare in the common good." Beyond the excellent work our denomination is doing as a publishing centre for the wonderful works of the Swedish Seer, there is that tangible vast work which the Lord is doing in changing an "intellectual" church into a church of service from the "love of the Lord as expressed through the love of the neighbor." It is a startling change, as startling as was in its day the change from an authoritative church to a dogmatic one.

Now let the student remember Swedenborg's often repeated philosophic axiom: "From first principles by ultimates," and there remains but one further feature to note. And that is, the fact that from the Divine side in spiritual things the progression is downward from the celestial,

through the spiritual, to the natural; while on the side of nature and history as expressed by and in the evolution of the church, the progression is the inverse of that, namely from the "natural" through the "spiritual" to the "celestial," using all these terms with the due caution called for by the fact that we are handling natural things, which by their very essence and nature are the reverse of spiritual things. But within these limits it is perfectly admissible to say that, as the "Holy, Holy, Holy," of the Seraphim on the spiritual side tells of the three heavens and their dominant work, which fills all heaven with the Lord and His glory, so the same Trisagion, looked upon from the natural side, tells of the gradual evolution of a true and "new" church out of the two preceding forms of cult; and it also tells that by this means, and for this reason, the "whole earth is full of His glory." And while thanking Him from the depth of our being for what wonderful things he has done for us, as an ecclesiastic organization, in fulfilling this promise to make "all things new," let us delay not at all in "giving God the glory" for the wondrous work foreshadowed in the Trisagion as to the Body of Christ, the church on earth.

ADOLPH ROEDER.

THE TEMPORAL AND THE ETERNAL

WHAT is temporal, and what eternal? At once the answer comes that the things of this world pass away, but the things of the spirit never. The mushroom springs up in wood or field overnight. We see it the next morning, and possibly may watch its growth for a day or two. But it soon fades away, and returns to the soil whence it came. So with all plant life: "in the morning it flourisheth, in the evening it is cut down and withereth." The trees of the forest may last for a long season. They may flourish even for hundreds of years, like the giant sequoias in California. The wood they furnish may be put to use by man, and last for centuries longer. But in the end they likewise will return to mother earth whence they sprang.

But the rocks and soil! What of them? They have been æons in the process of formation, and so far as we know they will continue to last forever. Are they not then eternal? Still we answer in the negative. They had a beginning, and they are continually changing. The Lord alone was, and is, and is to come forever; and He only is unchangeable. Thus we read in His Word: "Of old thou hast laid the foundation of the earth; and the heavens are the work of thy hands. They shall perish, but thou shalt endure."

Similarly with all things of the earth. Although we recognize that possessions of all kinds are in a sense indestructible, since they may be produced time and again without end, yet we do not hesitate to pronounce them relatively to the things of the soul as purely temporal. So far as we individually are concerned all worldly things are temporal. Death severs all connection with them. "When man dieth he shall carry nothing away."

This is equally true of worldly honors and dignities. "What is pomp, rule, reign, but earth and dust?" Rank, to

the poet Burns, was merely the guinea stamp, "the man's the gowd for a' that." Death levels all alike. The honors men gain all perish in the dust.

"But yesterday the word of Cæsar might
Have stood against the world; now lies he there,
And none so poor to do him reverence."

It is otherwise with the things of the spirit. They are imperishable. "Death was not spoken of the soul." Nothing that enters the mind is ever lost to us. Memory is eternal; it accompanies us into the world beyond. Everything that we have thought or cherished, whether expressed in action or not, remains with us, and can be reproduced in the spiritual world at any time. It is all eternal.

Yet again, in a special sense, we regard the Word of God as eternal. "The words that I speak unto you," our Lord said, "they are spirit, and they are life." It is also said that "the grass withereth, the flower fadeth, but the word of our God abideth forever." "The word was in the beginning, was with God, and was God."

In the New Church too we consider the message of the Second Advent as eternal. The Heavenly Doctrines were given to us from the Lord through His servant Emanuel Swedenborg, and exist in the spiritual world.

Thus we reach a definite conclusion with respect to the temporal and the eternal. The temporal is that which is of man, and this world of time and space, with its honors and possessions. It all passeth away. But everything that is of the spirit is eternal, and in particular the Sacred Scriptures or Word of God. This is the generally recognized distinction between the temporal and the eternal.

There is, however, another distinction between the two that is also generally recognized in an indefinite way by many, but presented in very clear and definite light in the doctrines of our Church. In some respects it appears to reverse the view of the subject just presented. It accentuates the fact that sometimes the temporal becomes spiritual and eternal, and sometimes also the eternal becomes temporal

and perishes. In other words, under certain conditions worldly possessions and honors are eternal, and under certain other conditions the knowledge of eternal things, the Word of God and the doctrines of the church, are temporal. This may sound confusing at first but becomes perfectly evident on explanation, as evident as our first definition of the subject.

Sometimes worldly possessions and honors are eternal. This does not mean that worldly wealth and positions of honor persist in the next world. But it does mean that under certain conditions men and women have great possessions and great honor accorded to them in heaven.

On the other hand, sometimes men and women may accumulate vast stores of heavenly or eternal treasure, and yet lose all hereafter. They enjoy the possession of it here, but in the world to come they part company with it.

Why is this? What are the conditions that produce such an extraordinary change, that turn dross into gold, and gold into dross? These conditions are simply those of use or abuse. We sometimes call money "filthy lucre." But that same perishable medium of exchange may become pure, everlasting gold if used to bless others without any thought of reward to ourselves. Wealth and possessions of a spiritual kind are given to those in heaven who learned to use them aright on earth. There are rich and poor in heaven. It is the same with earthly honors. When they are made the means of increasing our usefulness to others, and we think primarily of their good, then these dignities are blessings: they are eternal.

On the other hand the pure gold of the Word—the truth in God's Word—is turned into dross, so far as its possessor is concerned, when it is abused. In our Lord's parable of the talents it is the one talent of gold in the hands of the wicked and slothful servant who made no use of it. Therefore it was taken from him, and given unto him who had ten talents. "For unto every one that hath shall be given, and he shall have abundance. But from him that hath not shall be taken away even that which he hath." The gold he had was valueless to him: it was as dross or refuse.

This is what is vividly portrayed to us by way of illustration in the case of the Scribes and Pharisees. They were well versed in the Word of God. None knew the words of eternal life better. They were familiar even with its every jot and tittle. In parable the Lord likened them to the rich man clothed in purple and faring sumptuously every day. Theirs were royal garments, the vestments of the Heavenly king, the robes with which He clothed Himself—the Word of God. To read that also, and inwardly to digest it, provided them with a sumptuous diet. No food for the soul is richer than God's Word. But how about the rich man after death? It is a painful picture of one divested of his beautiful garments, and in torment from the lack of water. Awful indeed is the Lord's denunciation of these same Scribes and Pharisees, these hypocrites, who prided themselves in their possession of the eternal words of revelation. "Ye serpents," He said, "ye generation of vipers, how can ye escape the damnation of hell."

Still further illustration of this transmutation of the eternal into the temporal is furnished in the later Christian era. Here we meet with that unscriptural and irrational doctrine of salvation by faith alone. The lesson of faith was well learned. The Word of God was studied with assiduity, and an endless array of texts marshalled to prove the doctrine. But to what purpose? We have only to read the explanation of the Dragon and its indescribable fate in the "Apocalypse Revealed," to learn how valueless is the possession of the eternal truths of heaven if not used aright.

But now we are apt to claim that these things cannot be repeated in the New Church. We know that the Sacred Scriptures are the Word of God, because they contain a spiritual sense which treats of the regeneration of man and the glorification of the Lord. We know further that "faith without works is dead." We know that the eternal may be made temporal by the abuse of it. And we know the consequences of the abuse of eternal things. None better than the well instructed New Churchman.

Here lies our greatest danger, however, that we have such

clear light on the subject, and may mistake the light for the life. We may imagine that because we plainly see the mistakes of our forefathers, see where they misinterpreted the Scriptures, that therefore we cannot fall into the same error. There is the net that threatens to ensnare us. Shall we be enticed into it, or do we see the knotted cords, though in the shadowed path, and almost one in color with their surroundings? Unless we are on our guard we must get entangled in the mesh, and fall.

It seems quite natural that men who do not possess the key to unlock the treasure house of the Word of God should pass it by as an ordinary book. In the face of this, however, it is remarkable that so many men still cling to it as to no other book. The fact that it is an unusually fine piece of literature is not sufficient to account for its popularity. This can only be explained on the ground that the common people to-day as in the days of our Lord find therein the words of eternal life: they cherish above everything those portions of the letter of the Word through which the spirit shines bright and clear.

We, however, have the key that unlocks the mysteries of faith in the Word that we may rationally accept the truth, and walk in the light of the sun of heaven. There is nothing to blind us, or warp our judgment, except—pride.

Of all the causes which conspire to blind
Man's erring judgment, and misguide his mind,
What the weak head with strongest bias rules,
Is pride, the never-failing vice of fools.

Pride may rule our wills, and then turn the eternal treasure into dross.

There is nothing more deceptive than wealth. Men are seduced by the idea that the mere possession of money is one of the greatest blessings in this world, and thus they adopt all manner of dishonest methods to procure it, or use it to exalt themselves in society, to procure an influence by means of it in innumerable ways which they could not otherwise attain. The abuse of wealth is manifest through-

out the land as one of the most glaring violations of the laws of heaven.

Even more seductive is the possession of spiritual wealth, the knowledge of the Word of God and the teachings of the New Church. This heavenly treasure may be abused more dreadfully than earthly treasure. The possession of it may awaken a deeper and more destructive form of pride than that attached to mere worldly wealth. It may be accompanied by the most direful conceits issuing in secret or open contempt for the religious opinions and beliefs of all who differ from us.

The wealth of this world has increased to an incredible extent during the past century, due largely to the increased output in silver and gold. And there has been a corresponding increase in the abuse of wealth. Or rather, we should say that the increase of money has provided the opportunity for bringing to light hidden lusts and passions in the abuse of it that otherwise must have remained unknown. The permission has a good side to it. It is a blessing that these abuses are now coming to the light that they may be seen in their true colors and judged accordingly.

We have a parallel of all this in the increased knowledge of the Word of God and spiritual realities that has now come to all men, but in fullest measure to those who have studied revelation in the New Church. The danger of being seduced by this wealth of knowledge is very great indeed, and it were the grossest folly in us to close our eyes to the possibility of its seducing us in any manner or degree. We are heirs to real imperishable wealth, if we know our Scriptures and the teachings of our Church. But our responsibility is very great, being proportioned to our knowledge. The practical question for us is: Do we realize our responsibility? and, Are we using or abusing our treasures? Are we being seduced by them, or not?

The only way in which we can avoid being seduced is through practicing that which we know. The Word of God, contains in its letter all truths necessary for man's salvation. They are there naked, or only hidden from the eyes of man

by the thinnest veil. (Sacred Scripture, n. 55.) It is unnecessary to have the doctrines of the New Church to disclose or uncover them. But with the doctrines of our Church these living truths may be made clearer and clearer. By means of the doctrine of correspondences they may be illustrated without end. (Sacred Scripture, n. 56.) But these genuine truths of Christianity must be put to service or use if they would be made eternal. Are we using or abusing these treasures?

When we have learned the law "do unto others as ye would that they should do unto you," we have an eternal truth, but only in the abstract. When we have illustrated that law by examples in the Lord's own life, we have still more of the eternal truth, but only in the abstract. When we have opened the Scriptures by means of the science of correspondences and still further enlarged our conception of the doctrine of charity—(the Word treats of nothing else, Arcana Cœlestia, n. 9409) we have enlarged our knowledge of the eternal truth, but even yet, only in the abstract. Not until we bring that *eternal* truth into relation with specific *temporal* affairs to regulate them and direct them does it have any permanent value for us. Not until that abstract truth, that we all value so highly, is brought into actual contact with the thoughts of our hearts on every day affairs and checks and purifies them, does it become our eternal possession. The eternal must touch the temporal and transform it into the eternal too through regeneration, otherwise the eternal will perish with the temporal.

The eternal must be with us in all temporal affairs, in our homes, in our social life, in every business transaction, in our discussions upon political or religious questions, in our games, and pleasures, in our streets, and in our bed-chambers. The eternal must touch every earthly thought we have about temporal affairs, mundane affairs, and allow only those thoughts that are in harmony with the eternal truth to pass muster, and determine speech or action. The knowledge of the eternal that is not so brought into relation to our own temporal affairs—not our neighbors' affairs, but

our own—is like wealth abused which inevitably carries so much suffering and sorrow to the neighbor. Only through the regulation of the temporal by the eternal can we bring blessings instead of a curse to ourselves and to others too.

The doctrines of our church teach us that “the conjunction of temporal things and eternal things is the Lord’s Divine Providence.” (Divine Providence, n. 220.) That is a strong statement. Equally strong is the declaration that “temporal things and eternal things are separated by man.” (Ibid, n. 218.) In two ways man effects the separation. Many ignore the truths of religion altogether, and become immersed in temporal affairs and interests. And there are those, on the other hand, who love the eternal truths of religion—they love abstract theology—and they love the strife and contention for unity of faith, agreement in particulars of doctrine, which are to them the essentials of religion. All these things they love, but they hate the practical truth—hate the application of the truth to life. They hate change, particularly change in themselves.

The separation of the temporal and the eternal in these ways by man accounts altogether for the disorganized and disorderly state of society. Therefore we look in vain for evidences of the Lord’s Divine Providence in the world except in so far as the eternal touches and is conjoined to the temporal, transforming our whole characters, and binding us together, as children of the same Father in the heavens, in our home life, in our community life, and in our church life, never forgetting that the Lord’s Church exists everywhere on this earth, in every religion. (Arcana Cœlestia, n. 8152.) His kingdom is the neighbor whom we are to love in a larger sense than any separate organization or church, which only forms a very small part of “the Kingdom of the Lord on earth.” (True Christian Religion, n. 415; 416.)

LOUIS G. HOECK.

THE ORIGIN AND PERMANENCE OF EVIL.

THE origin of evil occasions a question which has occupied the minds of the greatest thinkers of the world. It has been answered in many different ways, all more or less unsatisfactory to enlightened reason. The answers thus far given in the teachings of the various religions, as well as in the explanations of philosophers, leave gaps, things unaccounted for, in the chains of thought which have not been filled. The world at large has not yet looked to Swedenborg for an answer, but in his writings it is given in a way that is entirely satisfactory to the mind that can follow him. Indeed, we should expect it to be so, because from all that Swedenborg himself says, as well as from the very nature of his writings, it is evident that his mission as a servant of the Lord largely consisted in revealing truths of life from the Word, and expressing and explaining them in a way that can be grasped by man's rational intelligence, so that he may thereby be enabled to "enter understandingly into the mysteries of faith."

In trying to get a clear conception of Swedenborg's teaching on this subject, the writer has found that unless, while studying it, the process of creation is kept in mind, the attention is apt to be centered too exclusively on some particular statements and passages without considering their dependence on other passages of equally great importance. But with this process in mind, all the different statements, scattered as they are through many volumes, can be marshalled into line and seen to form one logically clear teaching, satisfactory to the reason so far as the reason of man is able to grasp the creative work of Infinite Life.

Of the teachings which bear more or less directly on the subject the most important perhaps is this, that the natural plane of life is the means employed by the Lord for the

creation of spiritual beings who can receive life and feel it as their own, and so be able to put it to such use as they themselves individually may decide. This amounts to saying that if man were not created a natural man, with existence in the natural world, he would not be able to feel the life in him as his own or to use it according to his own will, and that without this ability he could not come into existence as an individual spirit. It therefore also implies that the creation of angels or spirits who never have lived as natural men on this or some other earth is unthinkable, and that such an idea can have been evolved only by the phantasy of some man unacquainted with the nature of spiritual life.

Another truth, bearing equally with that just mentioned on the question before us, is that the creating Life is Love itself and Substance itself. It therefore means the same thing to say that God creates, or that Life, or Love creates, and it also means that all creation, all things, spiritual, natural, and material, are made from the infinite Substance, which is the substance of infinite Life, or Love, or God.

To the mind that is already filled with old ideas, theological or philosophical, this teaching seems at first sight to emphasize the difficulty with regard to the origin of evil instead of removing it. If everything is created from the substance of God himself, the reasoning would seem to be the same as that of pantheistic philosophy, which sees in the visible universe only an emanation, or coming forth to view, of God Himself. It would seem to substitute the visible universe, including everything in it, great and small, good and evil, for the invisible, infinite God of Love and Truth. It would seem to give us matter and the forces of nature as a God to worship.

But the writings of Swedenborg do not teach that the natural substances contained in the visible universe *are* the substances of God, but that they are *made from* them.

It is true that he says:—"The Divine, which is substance in itself, or the only and sole substance, is that from which exists all and everything that is created, therefore God is

all in all in the universe" (Divine Love and Wisdom, n. 198); but he goes on to say, that some have seen this truth, that God must Himself be the sole and only substance, but they have not dared to give it more than a first thought, being afraid that it would lead them to a "Gordian knot," impossible to untie, or to confirm themselves in the pantheistic teaching that the universe is God. And he proceeds to say that "although God created the universe and all things therein *from* himself, still there is not anything at all in the created universe which is God." (Divine Love and Wisdom, n. 283.)

How the Gordian knot, which is seemingly implied in the statement that God is all in all in the universe, and that still nothing in it is God, could be untied, Swedenborg learned through his conscious experience in the spiritual world, where he could observe the laws of creation as there manifested. This knowledge he gives to men in the world who are able to receive it, in his doctrine of "discrete degrees" of life and substance.

This is the very basis of the spiritual philosophy contained in his writings. And in the explanation of this doctrine, the truth of which has been revealed to him out of heaven, he uses all his knowledge of nature, all his human power of logical thought, and all his capacity for expressing his thought in carefully selected words.

This doctrine of discrete degrees enables us to follow and in a measure to understand the laws of the Divine Wisdom by which the creation is ordered. It enables us to see in what way the natural creation was made the means for the spiritual creation. It allows us to perceive and understand the provisions made by the Lord, even before the existence of the natural world, for the reception of the spirit when it leaves this world after its separation from the material body. It shows us how these provisions make it possible for our spirits to live a real and complete individual life to eternity.

In fact, unless we clearly understand the doctrine of discrete degrees, we can not get a rational conception of the

laws that govern the influx of life from the Lord to us, and which make it possible for us to receive it and feel it as our own, nor without it can we see the use that the human life on earth serves for the development of life in the spiritual world.

All this bears more or less directly on the question before us.

It is comparatively easy to see that such discrete degrees of life and substance exist in the natural world. And in making this clear to our minds, we shall also be able to form a clear idea of what Swedenborg means by "discrete degrees," and how they can exist also in the spiritual world. Scientists tell us that many substances which exist in the earth also exist in the sun. When some of the substances of the earth are brought to a glowing white heat, they show the same kind of bars in the spectrum as are found in the spectrum of the sun. This, of course, is what we should expect to find, as Swedenborg tells us that the substances of the earth have been thrown out by the activity of the sun from its own substances.

This gives us a striking illustration of discrete degrees of material substances. Substances found on earth in a state of rest or inactivity seem to be entirely different from substances in the sun, which are in a state of intense activity. When some of the inert or inactive substances of the earth are brought into activity by heat, they are seen to be the same as substances in the sun. They are formed from them, but exist in a discrete degree.

When we consider that the things existing in nature, with all the laws that govern them, have their corresponding counterpart in the world of spirit created from the substances of love and truth there existing, we get an illustration of the relation that exists between the substances forming and constituting the spiritual body of man and the infinite substances in the Divine Creator. The substances which compose the bodies of the individual spirits are made out of substances from the infinite, but which are sent out from it, and thus, so to speak, away from it, and which

then come into a state of inactivity. Existing in this state or degree of discreteness, they are then acted upon by the light and heat of the spiritual sun, and created into individual forms of life. This is a first general statement of the meaning of which we get some idea by understanding the meaning of discrete degrees of natural substances.

But as there are several steps taken before elements from the natural sun become the inert substances of the earth, so there are several discrete degrees of activity in the substances proceeding from the sun, which have their corresponding counterpart on the spiritual plane of life, and of which we must have some idea before we can see how the infinite substances in the Lord, substances which are one with infinite Love and Wisdom, can be differentiated and come into existence in the form of man's affections and thoughts.

Remembering that everything in the natural, visible creation is symbolical of the internal spiritual, we turn to it for illustration. The atmospheres which proceed from the sun and surround the earth may serve as such.

The purest atmosphere proceeding from the sun is the aura, and the elements composing it serve as media for forces or motions that can not be measured by time. It holds all bodies, great and small, in their places, and we know the forces which are the result of its activity under the names of gravitation and cohesion.

The next atmosphere we call ether. It seems to be created by other substances thrown out from the sun, and which convey its activity with less instantaneous rapidity. We can at least measure the waves in the ether that bring light and heat from the sun to us.

Finally, the air, which is the third and grossest of the atmospheres surrounding the earth, contains other elements from the sun which are needed for the creation of organic forms of life, and is mixed with vapors and exhalations from both inorganic and organic substances on earth, which combine with the proper elements of the air in different ways. It is necessary for our breathing, and, by breathing,

elements in it are brought into the lungs and through them united with the body.

The elements of the purest atmosphere, the aura, seem to pervade all space in the universe. It not only holds the planets in their permanent positions relative to their suns and to each other, but it also holds all the suns in their places relative to each other. As the force of gravitation, or rather the medium of it, it acts on the largest bodies as well as on the smallest, deciding their positions and orbits. It also penetrates the matter of all bodies, for as the medium of cohesion it acts on the minutest of particles everywhere, determining their positions in relation to each other, and arranging all for use in the further processes of creation.

It does not change from aura into ether, and from ether into air, but the purer, finer elements of the aura are within those of the ether, performing their own work, moving in their own way, without detriment or hindrance from the elements of the ether. Within the elements of the air are the elements of both the ether and the aura. The air waves, which bring sound to our perception by vibrating the drums of our ears, move at a rate no faster than can be easily measured, still they do not in any way interfere with the immensely more rapid waves in the ether, which communicate light to our eyes, nor with the instantaneous action of the aura, which binds all things together. The ether is within and penetrates the air, and the aura is within and penetrates both the ether and the air, and the sun works through all three in different ways, in discrete degrees of activity, to bring about the conditions necessary for organic life on earth. All the atmospheres are elements from the sun, existing in discrete degrees.

Passing over to the spiritual creation, we are taught that the Lord is Infinite Love itself. This love can not, as it is in itself, or in its infinity, come to the perception of any finite created being, much less be received by any one. As a first step of accommodation to those He creates, the Lord, or the Infinite Love, sends out from himself Divine sub-

stance, and from this He creates the first finite, or His infinite love finited in such a degree that it can be perceived by created spirits and thus reveal something of His infinity to them. All of His infinite love dwells within and works through this first finited form of Himself, which is the sun of the spiritual world. From it are sent out the substances by which all things, spiritual, natural, and material are made, and these substances convey his love to the receiving forms of life which He creates. Materially, we receive it as heat and light from the natural sun, the means by which our bodily wants are supplied. Naturally, we receive that love as good natural affections and in the form of precepts guiding our understanding of orderly life. Spiritually, we receive it as the rays from the Lord's own love and wisdom, spiritual warmth and light, and we recognize Him as our sun, from which our life flows, His life in us, and we perceive far above us Himself within that sun, through which the infinity of His love becomes perceptible to us as the source of all life, though always beyond and above our finite power of reception and perception.

We are taught that Infinite Love, or the Lord as He is in Himself, acts from within that sun and that He sends out elements from it out of which He creates spiritual atmospheres and from them corresponding natural atmospheres through the natural sun.

In the highest of these atmospheres, the one sent out immediately from the spiritual sun, are elements of love and wisdom from the Lord, accommodated to the highest possible state in created men, in those celestial men whose affections and thoughts are formed most directly through the influence of the Lord's love to give of Himself, which love pervades and binds together all creation for his purposes. They feel it as love to the Lord and the neighbor, and their individual affections and thoughts are formed or built up by the elements from the Lord's own life in this the highest of spiritual atmospheres.

The next atmosphere is created by the Lord from ele-

ments of love and wisdom in a discrete degree from those in the first. These elements, like those in the first atmosphere, are animated, made alive and active, by the Lord's love of giving of Himself, but mediately through the first atmosphere, and so they become accommodated to the reception and upbuilding of spiritual men, who receive the Lord's life, not so directly into their affections, but mediately through the intelligent reception of wisdom in the form of truth, and thence into their affections.

The last and least active of the spiritual atmospheres is formed or created from elements of love and wisdom, which are so far removed from the Lord's infinite love of giving of Himself, that they retain very little energy from Him, but they are animated and put into activity in obedience to the influence from the Lord through the higher atmospheres, which pervade and act upon this lowest atmosphere in a way corresponding to that in which the aura and ether pervade and act upon the air. These elements are accommodated to the capacity for reception and to the upbuilding of those men whose forms of thought and affection are decided and built up by obedience to the Lord's influence through others rather than by a conscious perception either of His love in their affections or of His wisdom in their intelligent thought.

We are further taught that from the spiritual sun, which acts from the Lord's own infinite love of giving of Himself, other elements of His own substance are sent out, so accommodated to the lower creation, that they have no life left in themselves from the love of the Lord, and that from these substances is created the natural sun, in which they become pure fire, or the purest of natural substances. The spiritual atmospheres, created out of the living substances of the Lord's own love and wisdom, are behind, or rather within the atmospheres proceeding from the natural sun.

The infinite power, therefore, of the Lord himself, the power of Love itself to give of itself, controls, through the spiritual atmospheres, the natural creation. His infinite power gives to the sun its energy and creates the forces

we know as natural, all for the purpose of creating man. So man is natural as to the nature built up through the sun from natural substances, and he is spiritual as to the part which allows him to receive influences through the spiritual atmospheres of love and truth from the Lord, and to feel them as his own life in the form of affections and thoughts.

He may let the impressions from his senses decide the form of his thoughts and the quality of his affections, or he may let the inner influences from the Lord upon his spiritual senses decide them. He has freedom of choice, which sets him apart from the animals and makes him a man, a living spirit with individual thoughts and affections according to his individual reception of life, and he will live as an individual after the spiritual part of him is separated from the natural by the death of the body.

In the spiritual world each individual spirit is received into one of the atmospheres of that world, constituted of elements from the Lord in discrete degrees—into one or another according to whether his reception of life from the Lord during his abode on earth has prepared him to live in a higher or lower atmosphere of love and wisdom. The elements from the Lord's infinite substance, pervading all these atmospheres, furnish not only an atmosphere, in which individual spirits can live and breathe, but everything that their spiritual organisms need for their external subsistence, and all that makes that world as real and complete to the spiritual senses, as this world is to the bodily ones. They are living substances from the Lord's own love and wisdom, and, accommodating themselves instantaneously to the states of those in the spiritual world, they are created into real forms of good or truth corresponding to the needs, the affections, and the thoughts of the spirits that dwell in them. In that way the Lord continually furnishes out of His own life food for their bodies corresponding to their needs and desires, and an environment corresponding to their affection for good and their reception of wisdom. This environment in general is as constant as the affection for good with the spirits is constant, but

changes in particulars in correspondence with the changes taking place in the individual spirit with regard to his ideas of truth.

If now we try to bring together the rays of light presented in the different aspects of the teaching given the New Church through the Lord's servant, Emanuel Swedenborg, which we have considered in connection with the origin of evil, we find:—

1. That, as the endowment with freedom to choose between two kinds of influences, is essential to man, in order that the life he receives from Life itself may have permanent form and existence, and be felt as his own, the natural creation was provided by the wisdom of the Lord as the ultimate means for that end.

From this it necessarily follows, that the *possibility* of man's using the life he feels as his own, in accordance with what from the impressions upon his bodily senses and natural mind appears to him best, is inherent in creation.

From this it also follows that these impressions may be of such a nature that they will awaken in the man feelings and thoughts more or less inharmonious and contrary to those accompanying the influx of life from the Lord's love and wisdom.

Evil is originated when man chooses to follow such impressions from the bodily senses, rather than the impulses from the Lord's love, or the truth respecting His love.

Evil so originated becomes a lasting reality, as man continues to let such impressions decide the quality of his love and the form of his thoughts.

The possibility of evil is thus provided for in the laws or order of creation.

Its coming into real and lasting existence is caused by man.

2. In the next place from what we are taught of the way in which the Lord accommodates His life, His love, and His wisdom to the capacity of or reception with men in different states of life, sending life from Himself in different atmospheres, in which men as spirits, after being

separated from the material body, can live complete individual lives in different states or degrees of love and wisdom, we must conclude that when man, conscious of a spiritual nature, first came into existence in this world, all the influences upon him through the spiritual atmospheres were wholly good, there being then no evil atmospheres in the spiritual world.

From the teaching that the natural creation is from the same Divine proceeding, we must conclude also that the impressions that the first men received from nature through their senses were all good on the natural plane of life. Accordingly a complete and orderly, and therefore happy, natural life, without evil, must have been possible for man; aye, not only possible, but seemingly very much easier than it is for men now. Both planes of life being in Divine order, it would seem that it would be comparatively easy for them to lead a natural life, which would not in any way come in conflict with the exercise and development of their spiritual life in the form of affections and thoughts born by influx through the spiritual atmospheres, which carried the Lord's own love and wisdom to them, unsullied by any evil.

Although, as we have seen, the *possibility* of evil is inherent in the order of creation, it is not therefore a necessity, as some thinkers have held. They have come to that conclusion by observing that evil by its contrast with good can excite men to good, and stimulate their efforts to overcome the evil itself. Some readers of Swedenborg have found ground for such a belief in his doctrine of equilibrium between the influx from heaven and that from hell, in which man is during his earthly life. They have understood this to mean that without this equilibrium man could not have freedom of choice between good and evil, that without such freedom of choice man is not man, and can have no permanent existence, and therefore that evil is a necessity—and a permanent necessity. But this is not the teaching of the writings. The freedom of choice necessary is that between two sets of influences, and this necessity

is provided for by the creation of the natural world as a matrix for the reception of spirit, and by man's being first created as to his consciousness a natural man.

The men of the first church on earth were created spiritual and celestial *from* being natural. This means that although of a celestial and spiritual origin, they were at first conscious only on the plane of nature. Their lives on this plane were no doubt orderly—it could not be otherwise as the whole of nature was in Divine order. But the natural life is of a lower order than the spiritual, and when men became conscious of their spiritual life, and spiritual promptings from the Lord were received in their consciousness, they could choose a good of the lower life, even if that choice compelled them to stifle some impulse from the higher life.

Such choice is the origin of evil, for it destroys the harmony between the two planes of life, and perverts the forms of man's affections and thoughts from orderly to disorderly, from good to evil. But the forms and quality of these affections and thoughts thus produced will disappear as soon as the man, seeing the results, abandons his wrong choice. Even the impression on the spirit from the memory of the wrong choice will be removed or become quiescent when he is translated to the spiritual life in the atmospheres of love and wisdom prepared for him by the Lord from the foundation of the world, and the influence that passes through him to men on earth will be undisturbed by the temporary evil affections and thoughts he had chosen to follow at some time or other during his earthly life. Only by persisting in the choice of what is pleasing to his natural senses, even when the results are detrimental to his spiritual life, does man himself give lasting reality to evil.

The Lord has provided for a variety of forms of life to inhabit the atmospheres of the spiritual world as unlimited as is the number of men who have existed and who may hereafter come into existence on earth. But all the forms for receiving life from Him, that *He* has provided, are good forms, receiving life from Him as love and wisdom

in different degrees, in different ways, moved and bound together by His love of giving of Himself to others.

This teaching is all harmonious. It is all in accordance with what real knowledge we have of natural and spiritual law. It falls in line with the spiritual explanation given of the fall of man, as related in the letter of the Word, and above all, it is in full accord with that central teaching, which is like a brilliant stone, of which all other teachings are but different aspects or faces—the teaching that Swedenborg so often repeats, and which is summarized in the words that “the Lord’s end in view in creation is a heaven formed from the human race.”

As no evil can enter heaven, the Lord Creator, Infinite Love and Life, has not created evil nor provided in his creation for the necessity of evil. Man’s disobedience to the laws of love is the sole cause of evil being born into the world, and his persistent disobedience is that which makes evil lasting, first in the forms of his affections and thoughts and their effect on his will and his understanding, until, when he leaves the body, he is evil in a spiritual embodiment, a perverse form of the Lord’s love and wisdom.

The Lord permits him to form to himself out of the substances in the lowest spiritual atmosphere things corresponding to his perversions of love and wisdom, and so to form for himself an atmosphere and a home in the spiritual world adapted to the kind of life which he loves. The Lord permits even the creative life proceeding from Himself to pass through these evil spirits on its way through the atmospheres of the spiritual world, as well as through the angels. As the evil spirits are nearer to the natural plane of life than the angels, this permission seemingly allows the evil to grow in strength and permanency. Evil forms, embodying influences from the hells, come into existence in nature, and worse forms of evil in men, as they receive those influences.

Swedenborg tells us that this power of the hells, formed in the lower strata of the last spiritual atmosphere, had at one time grown so strong that it encroached upon and

threatened to destroy the heavenly societies in the higher, purer altitudes of the same atmosphere. But he also tells us that this power has been reduced through the victory of good over evil, of truth over falsity, and we may be sure that the created spirits of men can not defeat or overrule the Lord's own purpose in creation—the forming of a heaven out of the human race.

The Lord's creation is still going on. If evil is permitted to exist and to wield power, even that will have to serve His ultimate purpose and aim.

The teaching in the writings on the permanence of evil is apparently as clear, definite, and logical as is that on its origin.

We are taught that the ruling love of man is his life. That if the ruling love at the time of his departure from the material body is evil, the possibility of a new and good will being born in him no longer exists, and that he will remain a form of evil life to eternity. The life from the Lord will go out to him in the same way that it does to the angels, but as it reaches his consciousness the Lord's love of giving to others will in him be turned into the love of taking from others for himself. The Lord's wisdom showing true ways of doing good to others, will in his perverted form of understanding be turned into thoughts about the easiest way of enjoying life for himself and of depriving others of something for his benefit. And this perverted love and these evil thoughts rule in him in such a way that he will be perfectly heedless of any commandments forbidding him to think in accordance with them. Nothing can deter him except punishments administered from without, punishments which bring so much pain and agony that from sheer fear of them he desists. As long as that fear lasts it affects his outer demeanor and he may seemingly lead an orderly life, but the love of evil is unchanged within him, and as soon as the fear wears off he will act according to the promptings of that love as surely as he is permitted to live.

In short, the state of the evil in the other world is very

much like that of a great number of men now living on earth, the chief difference being that those living here may not consciously suffer on account of their evil, and that they may meet with some experience that will penetrate the shell of selfishness which has enclosed the remains of good stored up by the Lord through the influences from Him, from the heavens, and from persons living in the world, which they have had during their infancy and childhood. Such experience may open the way for heavenly influence upon the will for good still remaining in their interiors; their understandings may in such states be lifted up to perceive the evil in which they are and get a glimpse of what true life is. Their awakened good will, keeping this glimpse in view, may stir them with a desire to live according to the light of truth which the elevated understanding has seen, and as they persevere a new will or life may be born in them from the Lord, and a new man with a new way of looking on life be the result.

In the other life, as we are taught, the opportunity for such experiences is lacking, and the reason is that the awakening of the remains into activity must come through some impression while the mind is still living in the natural world. After the death of the body, the mind is withdrawn from contact with the natural world except through the memory of what has been. Even that is quiescent but can, when it pleases the Lord, be presented to the life, so that every thing, every impression made on the mind during life in the body, every experience that calls forth a thought in the understanding or an affection in the will may, so to speak, be lived over again. But all these experiences have been used. The revived memory of them can at the most explain to the spirit *why* his state is such as it is, and that his sufferings are the consequences of his own choice. The memory which still connects the spirit with the natural world is the very covering or envelope that holds his individual life together and decides its form. It is the "limbus," which the spirit of man brings with him from his life in the world, and without which he would be

diffused and cease to exist as an individual. It cannot connect him with the world in a way to bring new and more powerful influences to bear upon his natural mind, penetrating it and calling forth the image of the Lord in his interiors, and the remains will therefore be forever closed up within him. With them closed up, there is nothing in him to respond to the Lord's unceasing love—he will remain the same forever.

This teaching surely seems clear, and capable of being understood in but one way; the inevitable conclusion being that the hells will remain forever, because of the permanent quality of the evil in the individual spirits composing them.

PERSONAL NOTE:

While the teachings of Swedenborg on this subject now appear to me to admit of no serious doubt, I am aware that some sincere and intelligent New-Churchmen believe that all eventually will be saved. As at one time I held similar views it occurs to me that it may be useful to state briefly some of the reasons for my former opinion, as well as those that afterwards led me to reconsider it and to change my position.

When I first came into the Church my thoughts were so filled with other teachings of the doctrines that the question of the eternity of the hells assumed no prominent place. It was not until later, when preparing a series of lectures on the relation of the spiritual world to men on earth, that the doctrine of the permanence of evil for the first time appeared to me to come in conflict with other aspects of the subject contained in the writings of Swedenborg. Then I met with some difficulties, and although for the time being I put them aside they returned, and the idea grew in my mind that inferences could be drawn from what Swedenborg says on other topics which point to the eventual salvation of every spirit in hell. It seemed to me that in the writings two lines of thought are continually appearing which never can be made to harmonize completely. In one is the central truth that the end of creation is a heaven formed from the human race; also the doctrine of remains, and the teaching that punishments are inflicted only for a good purpose. In the other, what is said of man's ruling love, which cannot be changed after death, and of the "limbus."

Reading Tafel's "Documents," and Worcester's "Life and Mission of Swedenborg," (pp. 218-223, 5th ed.) I had been interested to see the changes that took place in Swedenborg's concep-

tions during the first years of his illumination. Apparently, up to the time of writing the *Arcana* he held the view that eventually all would be stripped of their desires to do evil, and by the mercy of the Lord would be taken from the hells. To be sure, as his experience in the spiritual world went on, and especially after the changes wrought by the Last Judgment, he came to see that the states he had looked upon as belonging to the hells were in fact states of vastation from which those vastated could be released and lifted up to heaven by the means of the salvation provided by the Second Coming of the Lord, but that those who were really in the hells proper never could be released to eternity.

But, I reasoned, Swedenborg's experiences in the spiritual world lasted only a few years after the Last Judgment, while the effects of the Lord's Second Coming will continue forever; hence the question arose whether later on he might not have come to see that these hells of which he speaks were also in reality places of vastation. When the desire to do the evil which is the very life of a spirit in hell becomes dormant from fear of punishment, and the spirit has thereafter almost no life of his own, will it not then be possible for the Lord to reach the remains, which never have been taken away, and from them to create a new life as he does with men on earth? Or, may not the effects of the Second Coming continue to grow stronger upon men on earth, overcoming the evils of the natural man, and the hells gradually lose the basis of their existence and be closed up? Many passages from the writings seemed to confirm these views. In the *Spiritual Diary* (n. 2826) it is expressly stated that the purpose in the treatment of the wicked spirit in the hells is "that by punishments and torments he may be tempered so as to be able to be in some good society."

Reasoning on these and other similar lines I finally became convinced that the punishments of hell would ultimately bring every spirit to a state in which he could be reached by the saving power of the Lord's Humanity. I saw, however, that this conception of the ultimate redemption of every spirit from hell was not the teaching of Swedenborg after the Last Judgment had taken place, and I then came to make a distinction between the personal authority of Swedenborg and the teaching in his writings, believing that his personal understanding of the truth did not always agree with the doctrines revealed through him when considered in their broader aspect.

At first I urged these views with some persistence, but after a time the desire to do so gradually left me and I found that when speaking about the consequences of not shunning evils as sins against the Lord I invariably stopped where Swedenborg did

—at opportunities left behind—and spoke of man as a fixed form of evil or of good after death. Still later, while preparing a series of lectures on Swedenborg and his Mission, my thoughts were led to dwell on the unique way in which during his whole life Swedenborg had been led by the Lord. The keenness of his intellect, the wonderful perspicuity of his mind, and his ability to bring together observations from very different fields of research and make them all illustrate spiritual truths, appeared to me more wonderful than ever before. But the evidence of the Lord's leading the man, making use of all his natural gifts and great powers, guiding his life so that he might develop for the service in store for him, held my thoughts more than anything else. I was thus led to ask myself in what way I was prepared to judge in the matter of Swedenborg's personal understanding of the truth; how my intelligence compared with his or my knowledge of nature and the world compared with his. The more I reflected the more humiliated I felt. Certainly, I could not claim a special guidance of the Lord or any illumination of my rational mind to be compared with Swedenborg's.

In this way I came to lay aside the conceptions formed in the manner above related and humbly to accept the truth as it is stated by Swedenborg in the works containing the doctrines revealed to the Church from the Lord out of His Word. In so doing I do not accept it on Swedenborg's personal authority, but because I can perceive and understand that the Lord could speak through his understanding of the things he had been enabled to see and observe in the spiritual world, and that He so spoke to him while he was reading the Word, and revealed to him the doctrines which guide men into the New Jerusalem.

ALBERT BJÖRCK.

DOCTRINE,—A FRAGMENT.*

It was not the writer's privilege to be present at the consideration of the preliminary theme of a recent meeting of the New-Church Club which touched the subject of capital punishment. It was presented, as he was subsequently informed, in a twofold manner, one doctrinal, the other from a civil standpoint. The purpose in alluding to the subject is not chiefly to bring it up for a new rehearsal, but mainly to consider the method of presenting a doctrinal view on some important point to a New-Church audience.

Through the kindness of a valued and dear friend some brief outline of the manner in which the subject was presented has been furnished. It is probably far briefer than the original presentation, but, is believed to contain the essence of the matter. It consisted essentially in a reference to a passage from the Sacred Scriptures, namely:

"He that smiteth a man, so that he die, shall be surely put to death" (Exodus xxi, 12);
and a reference to "Arcana Coelestia," n. 9349, where this commandment is said to be among the laws that have not been abrogated, and to contain "things which ought wholly to be observed and done."

*This is called "a fragment" because, as will be seen, out of a very large field covered by the subject the present treatment touches but a very small and perhaps isolated portion of doctrine in its relation to the Word of God, and a certain use of doctrine. If the use of doctrine is shown in the concrete example discussing the death penalty in the social organism, it is hoped that the example will be distinguished sufficiently from the relation and use of doctrine to allow these fragments to stand out as the theme of this presentation.

(*Editor's Note*:—This article is discussed in the first editorial of this issue, entitled "The Death Penalty.")

This reference to the "Arcana" was followed by three quotations:

"According to this judgment it shall be done unto him. This signifies that there shall be like punishment."

(Ibid. n. 9080.)

"Punishment shall be equal to the fault." (Ibid. n. 9137.)

"There shall be corresponding punishment." (Ibid. n. 9098.)

The friend who supplied the argument, which is affirmative to the law of capital punishment, writes: "I said to myself, if there is no more than this upon the subject of capital punishment, it is enough, if it is true; and I accepted it as true, because we are told that *all* the doctrines of the New Church come from the Lord alone."

Now, putting aside for the moment the idea of capital punishment, we find the affirmation of the holder of capital punishment supported first by a passage of Scripture and second by several quotations from "the doctrines,"—a course which might be pursued with regard to any doctrine. Putting also aside the ignoring of the fact that this law has another side, we note the holder's implicit confidence in "the doctrine" which he quotes as coming from the Lord alone.

We ask then, what is the form in which the affirmative conclusion is presented? It is this, that "the punishment shall be equal to the fault." This punishment is expressed in milder terms, "an eye for an eye, a tooth for a tooth" (Exodus xxi, 24; Leviticus xxiv, 20; Deuteronomy xix, 21). This is the law of retaliation, which the Lord quotes (Matthew v, 38), saying:

"Ye have heard that it hath been said, An eye for an eye, a tooth for a tooth."

He does not stop, but continues,—

"But I say unto you, That ye resist not evil: but whosoever shall smite thee on thy right cheek, turn to him the other also." (Matthew v, 38, 39.)

It is well known, that even ministers have termed acting

upon this advice "cowardly." The intention here is not to criticise an argument, but to point to the simple fact, that we have a Scripture teaching from the Lord's own lips which is not in harmony with another that was valid among those of the Ancient Church. Whoever can see that these two passages differ totally in their plain literal meaning will at least pause and view them both, and weigh them most carefully—then what? deliberately make up his mind that *this* one is right and the other is wrong? I doubt very much whether a thoughtful man would do this—though we know, perhaps, how often it is done. But what is the result if such procedure is embraced? If A and B are mutually exclusive of each other, does it follow that if A is, then B is not? Much as it may seem so this reasoning is incomplete: for though denying the identity of A and B, there is not a virtual denial of B if A is. This is rather abstract. Let us make it concrete. A man may, with such present light as he possesses, not be able to acknowledge Jesus as God, because Man and the Divine appear to him as exclusive terms. But this does not necessarily imply that if there is a God, then Jesus is not, i.e., that He is a non-existent personality or a non-entity. We may still grant that Jesus is a real man, and this may leave the way open to our receiving at some future time the view and the acknowledgment of the *Divine Man*, and thus open the door to a harmony where there appears at present lack of harmony—even contradiction.

This pausing for consideration calls attention to the fact, that basing the law of capital punishment upon the principle of *retaliation* is not in harmony with the Lord's view of it.

Of course we know that the harshness of retaliation is softened by the superimposed view, that "the protection of human society demands the upholding of retaliatory measures." When this protection of society is duly emphasized, it is then assumed that we have eliminated the retaliatory element which is the real cause of difficulty: and like so many gentle blindfoldings we accept this, and shut our eyes to the covered retaliation—that is, to the Lord's objection to it.

Let this reasoning for the present suffice, simply to allow a thinking mind to pause, while we ponder the "ye have heard that it hath been said," and the momentous "But I say unto you."

Before we return to it in another form, let us ask another question: Among the laws that "ought by all means be observed and done," the author of the "affirmative side" has adduced this one, "he that smiteth a man so that he die, shall surely die," but has not quoted two other very important laws of the same category:

"He that smiteth his father or his mother, shall be surely put to death." (Exodus xxi, 15.)

"Thou shalt not suffer a witch to live." (Exodus xxii, 18.)

Here are two other causes and by the terms of the quoted principle, "according to this judgment it shall be done," one who strikes father or mother "shall surely be put to death," and a witch shall not be suffered to live. Why do not the men, who quote passages from Swedenborg in support of their views affirming extreme penalty, make earnest propaganda to have these two causes embodied in the law that decrees capital punishment?

I am told however by those who are versed in the history of jurisprudence that these two above specified causes were in the Swedish laws (as well as those of other lands in the time of Swedenborg—for were not witches hanged in Salem, Massachusetts? Nineteen persons executed for the same cause in 1692, and the death penalty administered for them in England as late as the middle of the nineteenth century!) Swedenborg was too peace-loving a citizen to stir up the populace against a law he might personally not have approved, and too sagacious a member of a law-making body to propose laws previous to the generally-felt need for them. We know how in financial matters pressing hard upon the nation after a disastrous war he was foremost in proposing wise laws for the relief of the country; and how for the sake of staying the degrading vice of drink among his fellow-citizens he advocated most humane and sagacious measures, which seem as rational in our day.

Doubtless all wise thinkers will agree that ungrateful and sad as it is if a child so far forgets its relation to father and mother as to strike at them—the misdemeanor can now be dealt with without the extreme penalty. If we are at one that the delusion of witchcraft can be controlled without the degrading penalty of hanging or quartering those judged guilty of it, may we not ask, what has brought on the change since Swedenborg's day? *What* has abrogated a number of Jewish laws? Swedenborg answers: "they have been abrogated as to practice at this day." Where? "Where the Christian Church is." Why? Because it "is an internal church" (*Arcana Cœlestia*, n. 9349). In other words, the Jewish Church, so external that it was not even a church but the *representative of a church*, was so external that it needed more numerous, and more external, bonds for restraint than the Christian Church, and with internal restraints growing, external laws were abrogated. Shall we say that abrogation has ceased several hundred years ago? Then we shall be equally ready to assert that the internal development of the Christian Church has come to an end—and yet, "the crown of all the churches" has only begun to descend "from God out of heaven."

But do not let us imagine that "abrogation" means "annihilation." Swedenborg has shown clearly that such is not the case, when in that whole most lucid number (9349) he summed up what he had found in all those chapters, Exodus xx-xxiii, and demonstrated that all these laws have an eternal holy Divine meaning, whether still in force or abrogated and perhaps still in the process of being abrogated—an internal sense is there, binding to men as far as they can enter in, because bound in heaven, and indissolubly joined with the Divine.

If then there are laws that have been abrogated by the Church, because it is growing interiorly, and neither unruly children nor witches are put to death—though in Swedenborg's day the extreme penalty should surely be visited upon guilty ones—shall we say, "Oh, yes, these are minor

offenses; but it is different with murder?" Shall we shut our eyes to the fact that laws valid two hundred years ago have actually been abrogated, because "where the church is" they have been superseded by views more deeply within the letter? We need not stop to answer these self-evident questions. But let us turn to another position. Suppose we are not quite sure on this point, is it not pertinent to ask ourselves, Is it not strange that the Eternal Wisdom emphatically commands us in one place, without any modification whatever, saying:

"Thou shalt not kill"

and then as unequivocally says in another

"Whoso sheddeth man's blood, by man shall his blood be shed" (Genesis ix, 6)?

whether a man be killed accidentally, wilfully, or legally, it is killing, and one law says, "Thou shalt not kill," and another says, "Whoso sheddeth man's blood, by man shall his blood be shed!"

These laws surely are not harmonious in the letter. Shall we meditate for a while, and then deliberately say, It seems to me that only one of them is correct, and I must make a decision for myself which is right, and hunt for passages in the Scriptures to uphold the position I conscientiously take; furthermore, I must be faithful to the writings of Swedenborg and hunt for passages where he clearly upholds the view I have embraced seriously, earnestly, and yes, prayerfully?

But should we not be mindful that there is a subtle danger for the New Church as it has been in the former Christian Church to seek to escape from a dilemma by embracing either horn, whereby the other may be annihilated—especially when one passage of Scripture is in apparent contradiction with another? We know of no modern master-logician who with so consummate skill has solved riddles and dilemmas as has Swedenborg, and it seems that his guidance is of inestimable use to those who will patiently follow him, for he clears up difficulties not by his own wisdom, but by the might of Him Who alone can open

the eyes of the blind. What is the advice of our wise interpreter? A simple story; it is this:

Doctrine of genuine truth may . . . be fully drawn from the literal sense of the Word: for the Word in that sense is like a man clothed, but whose face is bare, and his hands also bare. All the things which pertain to man's life, and thus to his salvation, are naked there, but the rest are clothed; and in many places where they are clothed they show through, as the face shows through a veil of silk. As truths of the Word are multiplied from a love for them, and as they are arranged in order by this love, they also shine and appear more and more clearly through the clothing. But this, also, is by means of doctrine. (Sacred Scripture, n. 55.)

Bare for intelligent thinking, and bare for generous good deeds, bare, shining directly out of the letter of the Word are the genuine truths for doctrines of life! But many are veiled—yet not so veiled as to be forever invisible: *they are to be approached from those that are bare*. Thus they will be multiplied and with every new acquisition the power for comprehending new ones, and the enrichment of its store of previous ones is increased. This is the way in which Swedenborg came to the light, led by the Lord alone; that is, through the careful reading and study of the Word. As he gained a steadier and brighter light he saw clearly *the value of doctrine from the Word versus* doctrines made by men of the then existing church,—learned indeed, but not enlightened from the Word. This is shown in the "True Christian Religion," his last monumental doctrinal work; for nowhere so completely does true doctrine shine forth.

What has this to do with the present dilemma of "Thou shalt not kill" and "Whosoever sheddeth man's blood, by man shall his blood be shed"? This surely, that the Christian life can see clearly, there is a plain and straight path marked out for every one by the first, "Thou shalt not kill." But what can we do with the other, "He that smiteth a man, so that he die, shall be surely put to death"?

So far as the passages (9080, 9137) "according to this judgment it shall be done," "Punishment shall be equal to the fault," are concerned they occur in explanations of

passages that deal with laws not obligatory, and therefore they should not be adduced, much as they appear in formal sympathy with the "affirmative position." They have simply no connection. Swedenborg's method will help us to say: If the precept "Thou shalt not kill," is clear as doctrine, then the other is a veiled truth of doctrine where the letter does not shine. Can the light shine into it, so that it too will shine? Yes, says Swedenborg, let the inner sense speak from heaven and this passage too will shine. What then is the inner sense which the church is beginning to see?

The life of man inmost is his love. Heaven's light on earth is love towards the neighbor. If any man destroy that life in another—a brother—he destroys his own opportunity of loving his neighbor, and when the opportunity of exercising one's love is destroyed one's life is destroyed—the man who has slain another, is "surely killed."

When Swedenborg declares, "doctrine must be drawn (*haurio*) from the letter of the Word, and confirmed thereby," this does by no means carry the idea that the letter of the Word must be quoted as doctrine, and then be duplicated by another literal quotation from the Word: *haurio* does not mean to quote, but to bring out as the bucket draws water from the depth of the well, and brings it to the surface for use. Even a passage that seems perfectly clear as a literal teaching is a well from which can be drawn waters of salvation. For even that plain letter, "Thou shalt not kill," has a spiritual, deeper a heavenly, and inmost a Divinely holy teaching. A thinking New-Churchman will therefore not string passages together as mere words, but link holy meaning with inner meaning until the whole Word becomes aglow with Divine holiness.

We have alluded to two passages containing laws abrogated since the days of Swedenborg. Perhaps it may not be superfluous to advert to the use of the term "abrogate" in connection with the Word. Before this can be done something must be said as to "doctrine" and the Word.

When Swedenborg so emphatically states that doctrine

must be drawn from the letter of the Word, it is by no means to be understood that the letter of the Word is doctrine; for the Word is the ultimate of *revelation* and not doctrine. But what man derives from the letter of the Word for a life of regeneration, that is doctrine from the Word. The doctrine depends upon man's understanding of the letter of the Word; an enlightened understanding will derive clear and true doctrine from it while an unenlightened understanding may derive false doctrine from the same letter.

When we read, that such and such laws of the Scriptures have been abrogated, it does not therefore mean that the *letter* of the Word has been abrogated, recalled, or abolished. The letter of the Word is never abolished or annulled. The human understanding of the letter may change, and then the doctrine which is drawn from it will change; but the letter of the Word remains the same however man's views with regard to its teaching may change. The human change of view signalizes an increase in depth with the progress of regeneration. It becomes interior and approaches the heavenly view as love for men increases.

The Word is then understood interiorly, and, as Swedenborg says, the sense of the letter is exalted. The statement also, that the inner or spiritual meaning of the Scripture is doctrine does not invalidate the statement that doctrine must be drawn from the letter of the Word; for the inner meaning is the sense of that letter. As an inner meaning of the letter comes to view the former more external appearance vanishes, but the letter remains the ultimate container of the inner sense. Therefore the letter remains, while the understanding progresses; the former meaning is abrogated, but the letter retains its force.

Human laws are presumably all based upon the Sacred Scriptures as understood in the letter; for it is not to be supposed that lawmakers would deliberately frame laws that are known to be contrary to Divine laws. Nevertheless the human understanding of the letter of the Word is bound to change where there is a living church. To

this presence of the Word is due the human enlightenment and the consequent change of civil laws. To this change is due the removal of the death penalty from the criminal behavior of children towards parents so long as it is not extended to murder. To this also is due the abrogation of the crime of witchcraft, formerly an excuse for administering the extreme penalty.

If we concede that the law with regard to these two causes for the death penalty has been abrogated since the time of Swedenborg are we in danger of minifying his writings, or of making the Word of God of none effect?

Before taking up this point I desire to state an objection to some present use of terms reaching into common speech in the Church.

1. As to calling Swedenborg's works *THE Doctrines*, and using such expressions as "the Word teaches" and "THE Doctrines teach"—as if we had now two distinct sources of teaching for the church. There is only one Source of teaching for the New Church, and that is the Word of God, and teaching or doctrine is to be drawn from that Source alone. Swedenborg nowhere designates his works as "THE doctrines of or for the New Church," though he states definitely some "doctrines of the New Church," without designating that they are either all, or the exact syllabus, that a Christian must accept. We accept them, because we see them to be true; but we find abundant opportunity, even need, of accommodating what we understand of them to the comprehension of others.

The writer does not even know that Swedenborg designates what he has written as *THE writings*, a term that comes dangerously near to that of the Sacred Scriptures which are eminently *THE Writings for the Christian Church*. He calls his literary productions *opera* (*his works*), and we shall use this term because it is simple and true.

2. The writer prefers this term to either "the doctrines" or "the writings," because these other terms constantly call up the idea of "Swedenborg's authority." It

is most unfortunate that this term has ever been introduced. Swedenborg ought to be left to be or become whatever he may be or become to any; much to those who can grasp much, little to those who can grasp only a little.

Any one's insistence that Swedenborg must be accepted as authority may have a tendency to destroy at the outset what the unbiased reading of his works might produce: the genuine embracing of truth which commends itself to a sound mind. We sincerely believe that the dropping of the word "authority" from Swedenborg and his writings, as well as any confusing terms that tend to make reason a captive, would be an immense help to ourselves, and an opening towards genuine breadth.

We ask now, with this in mind, do we endanger the authority of the Word, or the truth of the teachings in Swedenborg's works if we find and accept the fact that laws based upon the letter of the Word have been abrogated since the time of Swedenborg?

Why surely, neither have we undermined the letter of the word nor impugned Swedenborg's works, for by the abrogation of a law where the now interior church is, the letter of the Word is not touched at all; it remains in its entirety. And as to Swedenborg's works, they have enunciated the sense of a spiritual meaning long before that meaning has become in any sense universal in the church.

Is it not precisely because of his teaching a truer spiritual meaning that not only these two laws, but other doctrines also, have become abrogated almost universally where the Christian church is growing in the lives of men? Go to any funeral and what is more common than to hear a minister remark upon the continuance of life, and the actual rising into life, experienced by the one over whose remains the funeral services are held—yea, risen, while the dead body is being decently disposed of? Was this believed or taught in Swedenborg's day? Then why his repeated strong asseverations that men do rise immediately after death? Has not the doctrine of the resurrection of the material body been abrogated also since the day of Swedenborg?

Or another doctrine, which was the great proof of Christianity until quite recently—What has become of “the sacred Trinity of persons?” To be sure it lives in faiths and creeds; but scarcely anybody can be said to hold it conscientiously; is it not rapidly giving way to a saner idea of one God, even if that God be more an idealistic concept than a definite perception?

Is it not true that the complete absence of doctrinal teaching from the pulpit of our day comes very near to the total abrogation of the old systems of teaching in the various bodies of the Christian Church so that the reality of a fulfilment of the Lord’s prediction is at hand, saying, “Behold, I make all things new.” And, are we not approaching a new era in the momentous changes which the entire punitive justice of our day is undergoing, and is ever more pressed to extend, as a result of these changes which are re-making the Church?

We may safely conclude that the saner views of rational living of this New Era are due to a greater light shining from the East to the West because the Word has been opened, and is now studied with a new vigor; its light affords deeper insight into social conditions, and as its teachings reach more directly into the external life the old doctrines crumble and interior ones take their place to make the lives of men more humane, so that there begins to come to view the great universal truth which is the crown of New-Church teaching, that there is but one doctrine throughout the whole Word which is the doctrine of charity, or love to the neighbor.

JACOB E. WERREN.

RAMSTRÖM'S THESIS ON SWEDENBORG'S THEORIES OF THE STRUCTURE AND FUNCTIONS OF THE BRAIN

STUDENTS of Emanuel Swedenborg are united in attributing to the master a scientific mind, colossal even among the intellectual giants of that famous age. Emerson's exclamation, "he is not to be measured by whole colleges of scholars," well describes the attitude that we moderns of lesser mental stature assume in contemplating his achievements in philosophy and in natural science.

Swedenborg's place among the pioneers in scientific discovery and his position in the foremost rank of the great philosophers have long been recognized by those familiar with his works. Translators and editors of his writings have frequently, and with able pens, set forth their author's claims to recognition. Immanuel Tafel, J. J. G. Wilkinson, Rudolph L. Tafel and many others, have pointed out at various times the astonishing penetration of Swedenborg's scientific vision and the amazing scope of his philosophic genius.

Among modern scientific men the value of Swedenborg's scientific work has been obscured by his metaphysical and theological writings, and it is only within comparatively recent years that his contributions to science have become widely recognized. This recognition has been due in large measure to the work of the Royal Academy of Sciences in Sweden, of the Swedenborg Society in England, and of the Swedenborg Scientific Association in America; and also to the utterances of such widely known scientists as Gustaf Retzius, Svante Arrhenius, and Max Neuberger.

But among those who have not the opportunity to study the scientific writings of Swedenborg in detail an exact knowledge of the particular grounds for his fame is not

easy to attain. It is commonly agreed that Swedenborg anticipated later scientific discoveries, and a frequent impression appears to be that this anticipation was due to intuition, to a lightning-flash of genius, illuminating the future beyond the eyes of common men. That this is not the case is revealed by a careful study of his works, for no man ever appealed more frankly to observed facts, nor took greater pains to avoid assumptions not warranted by them, than did Swedenborg.

Martin Ramström's recent thesis on "Emanuel Swedenborg's Investigations in Natural Science and the Basis for his Statements concerning the Functions of the Brain" is therefore a welcome contribution to the literature of the subject. Several conclusions reached by the author are of importance, and his deductions are so logical and so well-grounded that the work merits a careful review.

The thesis was published as a memorial volume upon the occasion of the two hundredth anniversary of the foundation of the Royal Society of Science of the University of Upsala, celebrated November nineteenth, 1910. Henrik Schück (in a short introductory paragraph in Swedish) outlines the history of the Society, sums up its valuable services to science, and refers to some of its noted members, among them Swedenborg, Linnæus, and Celsius.

The little work itself is written in English. The author opens with some preparatory comments upon the recently awakened interest in the scientific work of Swedenborg, mentioning the names of several well-known men who have lately called attention to the subject. The main body of the thesis is divided into two parts. The first (pp. 11 to 25) deals with Swedenborg's Investigations in Science in general, the second (pp. 26 to 49) treats of the Basis for his Statements Concerning the Functions of the Brain, particularly as exemplified in his studies of contemporary physiologists. The closing pages of the book (pp. 50 to 59) are devoted to full and carefully prepared notes and references to the literature.

In the first section of part one Swedenborg's mathematical

and astronomical studies are briefly reviewed and a description given of his engineering labors in conjunction with Polhem.

In the second section we are shown how Swedenborg pushed his investigations eagerly forward, traversing the fields of geology, mineralogy, chemistry, physics, and finally cosmology, and contributing something of value to each one in turn. Throughout he was guided by the science that first attracted him, mathematics, and even thus early we see him adopting a plan of study that later became a fundamental principle of his scientific method, namely the utilization of the experiments of others as a basis for his deductions; in other words, of working "with the head over that which others have worked over with the hands;" although he did not omit testing the correctness of his conclusions by means of experiments when this was possible. Attention is called to the importance in the history of geology of Swedenborg's great work, *Opera Philosophica et Mineralia* (Dresden and Leipzig, 1734). Volume one of this work (the treatise commonly known as the *Principia*) contains Swedenborg's cosmology. Ramström refers his readers here to Professor Arrhenius's introduction to volume II of the Royal Academy edition of Swedenborg's scientific works (the *Cosmologica*), contenting himself with a brief reference to the ideas which appear to have influenced later cosmologists, notably Buffon, Kant, Laplace, G. H. Darwin, Lambert, and Wright.

The final section of the first part of the thesis treats of Swedenborg's anatomical and physiological investigations. We see here how he turned from the inorganic to the organic world, pursuing his researches with characteristic boldness to the inmosts of nature in an attempt to discover the seat and qualities of the soul. His first great physiological work was the *Œconomia Regni Animalis* (Amsterdam, 1740-41) treating of the blood, the brain, and the soul. Ramström's interest lies chiefly in Swedenborg's conclusions regarding the brain and its functions, and these are accordingly taken up in detail.

The general structure of the nervous system was known

before Swedenborg's time, but scientific opinion was not at all united with respect to the functions of its various parts. We learn that Swedenborg accepted the current doctrine of animal spirits. This point is not dwelt upon by Ramström, perhaps because present-day scientific thought rejects the hypothesis. It is probable that the doctrine influenced Swedenborg's views as to the function of the nerve-cells and the mechanism of nerve action much more profoundly than would appear from Ramström's statements. Swedenborg believed with Malphigi that the brain was a gland, and with Boerhaave that the nerve-fibres were tubular. This indeed was the commonly accepted opinion. His doctrine of use, and his dictum that "order is like unto itself in greatest and in least," could thus scarcely have failed to lead him to his most important conclusion regarding brain function, namely that the seat of motor and sensory activities lies in the cerebral cortex; and moreover that in the last analysis it is to be found in the cells of that cortex, which he called *sphærulæ* or *cerebellula*. This conclusion is now well known to be the true one. As we shall see later, other views were held by most of the eminent anatomists, and Swedenborg appears to have been guided to his opinion by indirect evidence, and doubtless also by his failure to find experiments which directly controverted his theory. We may find it necessary at the present time to hold decidedly modified views as to the nature of animal spirit, but whether we consider it as identical with cerebrospinal fluid, or with the energy active in nerve impulses, or whether we deny its existence altogether, we cannot fail to recognize its influence in molding Swedenborg's opinion. Indeed the animal spirit may justly be considered the core of Swedenborg's physiological doctrine. Upon it he built up his theory of the various bloods, and without it, or something corresponding to it, his carefully worked out hypothesis falls. This by no means detracts from the greatness of his teaching as to the cortical functions; rather does it serve to emphasize the value of his method of deduction, guided by "*experientia, geometria et facultas ratiocinandi*."

Ramström next calls attention to Swedenborg's conclusions as to the relation of the nerve-fibres or "tubules" to the *cerebellula*. They were in his opinion intimately associated, each fibre serving as a connecting link between its own cortical cell and the periphery. We see here a striking resemblance to our modern neuron theory, and once again we may say in passing that Swedenborg was clearly guided to his conclusion by his doctrine of animal spirits. Even more striking are his teachings respecting localization. He was impressed with the belief that the *cerebellula* must of necessity possess separate functions in different locations. Hence they must be associated into cortical groups, each functionally differentiated. This is no less than the doctrine of areas and centers of our own day. But Swedenborg was even more specific. He conceived these areas to be motor and sensory in function (although the distinct separation of the two functions is not clearly worked out) and he went still further, ascribing to the groups self-determination, which reminds us a little of the dendrite-retraction theory of Ramon y Cahal, and cooperation, which is distinctly suggestive of our modern conception of association. Furthermore he recognized subordinate groups in the gray matter of the medulla oblongata and the spinal cord, which governed automatic and habitual body functions. We are well acquainted with these at the present day as centers controlling reflex action.

Swedenborg then asked himself the question: does the soul reside in the cortex, in the *cerebellula*, in their "secretion," the *fluidum spirituosum*, or is it still to be found elsewhere? He failed to satisfy himself on this point, and therefore began, with characteristic indefatigability, to traverse the entire field again, planning a treatise of much broader scope than the *Œconomia*. This was the great work *Regnum Animale*, commonly known as the "Animal Kingdom," but more happily rendered by Ramström as the "Soul's Kingdom." It is to be regretted that this term is not more widely used. The *Regnum Animale* was never finished. A part was published, and the whole plan was later recast by

the author. Many portions were left in manuscript. A part of the section *De Cerebro* was translated and published in English by R. L. Tafel (*The Brain*, London, 1882-87).

In *Regnum Animale* (including *Psychologia Rationalis*) and in *De Cerebro* Ramström finds Swedenborg at the summit of his scientific career. The hypotheses concerning the cortex and its functions set forth in the *Æconomia* were restated in amplified form. But Swedenborg here went further in the task of localization. The brain's psychic functions he clearly placed in the *cerebellula* of the anterior portion of cerebral cortex. These *cerebellula* were more fully differentiated into groups, and finally the motor areas were localized, also in the anterior cortical convolutions. More remarkable than all, he plainly described these motor areas as being situated in inverse order as compared with the muscle-groups of the body controlled by them. In other words the foot and leg centers were highest in the cortex, the abdominal and thoracic centers in the middle and the face and head centers below (*Brain*, n. 68).

It is now well recognized that the frontal lobes play a most important part (although perhaps not the sole part) in the higher psychic activities of the brain. Furthermore modern research confirms indubitably the hypothesis of the inverted order of motor centers in the Rolandic area. But so meagre was the evidence of this in Swedenborg's time that his conclusion regarding it is frequently referred to as an instance of his prophetic insight into matters scientific. That it was not intuition but sagacious reasoning based upon a keen analysis of observed facts, Ramström clearly shows in the second part of his thesis.

This second part is devoted by the author to a consideration of the *basis for Swedenborg's statements concerning the functions of the brain*. He shows us first that, while Swedenborg doubtless did some dissecting and other experimental work, his conclusions were drawn for the most part from the researches of others. His reading covered a wide field, for not only was he familiar with all the important works of anatomy, but he drew also upon accounts

of experiments on animals, pathological studies and clinical observations. This is in accord with Swedenborg's general scientific method and tallies with many statements found in his works.

During Swedenborg's time widely differing opinions were held as to the functions of the cerebellum. Swedenborg concluded that this organ was concerned in the so-called "vegetative" functions (circulation, respiration, digestion, etc.), basing his opinion upon the behavior of dogs whose cerebral hemispheres had been extirpated, as well as upon a large mass of clinical data. Modern science has not yet wholly solved this problem. While it is now known that the "vegetative" functions have their chief centers in the medulla oblongata, the cerebellum has been shown by the researches of Flourens, Lussana, Luciani and others to be intimately concerned in certain reflex functions connected with equilibrium and locomotion. Furthermore it is notable that Swedenborg followed Willis in including the medulla with the cerebellum in his theory, so that while he may have erred as to the chief function of the cerebellum, at least the negative contention that the "vegetative" centers are *not* to be found in the cerebrum is in full accord with present knowledge.

Taking up the question of the sensory centers, Ramström analyzes the views of Descartes, Haller, Willis, Malphigi, Boerhaave and others, showing that the general consensus of opinion was rather against than in favor of their localization in the cerebral cortex. These authorities were for the most part agreed that there was a close relationship between the animal spirits and sensory phenomena. Swedenborg was undoubtedly led to place the source of the animal spirits and hence also the sensory centers in the cortex by his studies of clinical cases and pathological observations. In this he followed the method most fruitful to all modern investigators.

Ramström tells us that he is unable to find even a hint in the early literature as to the localization of the motor centers in the cerebral cortex. But Swedenborg's statements upon

this point are unequivocal, and a reference to the authorities mentioned by him shows plainly that his deductions were made once again from reports of clinical cases. He saw clearly the meaning of the symptoms described, and indeed we cannot but wonder how the truth could have escaped the learned clinicians themselves. In one case quoted from A. Pacchioni, we read that "the lips were drawn a little to the left side (*labiis ad sinistrum paululum detractis*), indicating a right-sided facial paralysis, which was shown on autopsy to be caused by a depression in the left cerebral cortex.

Proceeding to more specific localization within the cortex itself, we learn that there was a general acknowledgment by anatomists of some kind of subdivision of the cerebral substance into parts which performed distinct functions. Thus Boerhaave thought various portions of the medullary substance subserved different sensory uses. Descartes believed sensations and motions arose from certain points on the walls of the third ventricle. (Ramström reproduces a plate from Descartes' *Tractatus de homine* to illustrate this theory.) The observations of Willis and of Vieussens, particularly regarding the ganglia in the floor of the lateral ventricles, were seized upon by Swedenborg as important. Vieussens had traced the fibres of the cerebral medulla downward through the internal capsule to the spinal cord, and had studied closely the connections of the corpora striata and the optic thalami. From these data Swedenborg was able to form a remarkably clear picture of the functions of these structures. His view of the internal capsule as the great pathway to and from the periphery is distinctly modern. To use his own expression, it is the "Mercury of the Olympus."

Ramström is of the opinion that Vieussens' researches were the basis of Swedenborg's division of the anterior cerebral cortex into three "lobes," and of his hypothesis of the inversion of the cortical motor centers. The French anatomist had noted that the fibres descending from the upper region of the cerebrum passed into the posterior region of the spinal cord. He had also traced the middle fibres to

the anterior region of the cord, and the lowest fibres through the medulla oblongata to the cranial nerves. Now the cranial nerves were known to control the muscles of the head and face, and the middle fibres could be traced through the cord to the chest and abdomen. Hence Swedenborg, by applying the facts to his theory of the cortex, could base his conclusion as to the location of the inferior and medium motor areas upon solid observations. Vieussens had brought out no facts regarding the distribution of the fibres of the highest region, and Ramström therefore considers Swedenborg's correlation of these with the muscles of the lowest part of the body to be a tentative one. Perhaps Swedenborg concluded this by exclusion.

Swedenborg's conception of the *cerebellula* or nerve-cells apparently rests upon a less firm experimental foundation. Microscopic studies were not wanting, but imperfect apparatus, faulty technique and lack of adequate staining methods made them vague and misleading. But the presence of minute rounded or oval bodies in the cortex was generally recognized, and Swedenborg, having satisfied himself that these bodies were the beginnings of the nerve fibres, was required by his chain of reasoning to attribute to them the fundamental place. They were the ultimate structural units, and brain function was thus of necessity the sum of their coordinate activities. But here, as before, the soul, the ruler over all, escaped him. He pursued it one step further—to the *simple fibre*, but in this Ramström does not follow him.

The thesis concludes with a brief summary, recapitulating the essential points of the second part. The author has expended much more time and labor upon his work than would appear to the casual reader. The text, despite several typographical errors, is carefully edited throughout, and the references are full and trustworthy. A handsome engraving of Swedenborg in the robes of an Assessor of the College of Mines serves as a frontispiece. The thesis is a valuable contribution to the literature on Swedenborg's scientific labors, and is a worthy tribute to one of the greatest minds the world has ever seen.

E. A. FARRINGTON, M.D.

EDITORIAL DEPARTMENT

THE DEATH PENALTY.

FOR nearly a year in the New-Church Club of Boston, having a membership of seventy-five men from a number of New-Church Societies in the vicinity, the question of what Swedenborg teaches concerning the death penalty has come up for consideration frequently. It was first suggested by a bill in the State House, opposite the Boston Church, to abolish capital punishment from the laws of Massachusetts. The subject proposed was, How shall a New-Churchman regard this bill? A minister was asked to present a brief paper on what could be found in the writings of Swedenborg, and a lawyer was requested to present the matter from his point of view. The minister reported that he had found no specific teaching with regard to the abolishment of capital punishment in Swedenborg's works; the lawyer expressed the opinion that in the progress of civilization more internal restraints might be sufficient to control the crime of murder, and then the death penalty could be abolished without danger to public welfare and with advantage to modern methods of reforming instead of avenging society in the treatment of criminals. Another lawyer, however, had found references to the death penalty in the writings of Swedenborg which seemed to recognize it as orderly. Among the passages quoted to the same effect the following are sufficient now:

There are two classes of things which must be in order among men, namely, the things of heaven and the things of the world. The things of heaven are called ecclesiastical and those of the world are called civil.

Order cannot be kept in the world without rulers, who are to observe all things that are done according to order and all that are done contrary to order; and who are to reward those who live accord-

ing to order and punish those who live contrary to order. If this be not done the human race must perish; for it is inborn in everyone by inheritance to wish to rule over others and to possess their goods; and from these come enmities, envyings, hatreds, revenge, deceits, cruelties, and many other evils. Wherefore unless they are kept in bonds by the laws, and by rewards agreeing with their loves, which are honors and gains for those who do good things, and by punishments contrary to their loves, which are the loss of honors, possessions, and life for those who do evil things, the human race would perish. (The Heavenly Doctrine, nn. 311, 312.)

This clearly recognizes the death penalty as in order when it is found necessary for the preservation of society.

But a layman and a minister added to this a passage which seemed to them to make the death penalty mandatory in the New Church. It follows:

In chapters xx, xxi, xxii, xxiii, [Exodus], the laws, the judgments, and the statutes, which were promulgated from mount Sinai, have been treated of, and it has been shown what they contain in the internal sense, thus how they are perceived in heaven—namely, not according to the literal sense but according to the spiritual sense, which is not apparent in the letter but still is within it. He however who does not know how this is may conjecture that the Word as to its literal sense is annulled, for the reason that that sense is not attended to in heaven; but it is to be known that the literal sense of the Word is in no way annulled thereby, but rather is confirmed, and that each word derives weight and is holy from the spiritual sense which is within; since the literal sense is the basis and fulcrum on which the spiritual sense rests, and with which it coheres in closest conjunction, insomuch that there is not even a jot or a point or a tittle in the letter of the Word which does not contain within it the holy Divine From this it is plain that the external rituals of the church, which represented the Lord, and the internals of heaven and the church that are from the Lord, and which are prescribed in the Word of the Old Testament, have indeed been for the most part abrogated, but that still the Word remains in its Divine sanctity, since, as already said, each and everything therein still involve holy, Divine things, which are perceived in heaven while the Word is being read; for in each particular there is a holy internal which is its internal sense, that is, its heavenly and Divine sense. This sense is the soul of the Word, and it is truth Divine itself proceeding from the Lord; thus it is the Lord Himself. From this it may be evident how it is with the laws, the judgments, and the statutes which were promulgated by the Lord from mount Sinai, and

which are contained in chapters xx, xxi, xxii, xxiii, above explained—namely, that each and all things therein are holy, because they are holy in their internal form; but that nevertheless some of them have been abrogated as to use at this day where the church is, which is an internal church. Some of them however are such that they may serve a use if people are so disposed; and some of them ought wholly to be observed and done. And yet those which have been abrogated as to use where the church is, and those which may serve a use if people are so disposed, and also those which ought altogether to be observed and done, are equally holy in the holy internal; for the whole Word throughout in its bosom is Divine. The holy internal is that which the internal sense teaches, and is the same with the internals of the Christian Church, which the doctrine of charity and faith teaches. That these things may be presented to the apprehension, let us take for illustration the laws, the judgments, and the statutes which are recorded in the aforesaid chapters. Those which ought wholly to be observed and done are those which are contained in chapter xx, verses 3-5, 7, 8, 12-17, 23; in chapter xxi, verses 12, 14, 15, 20; in chapter xxii, verses 18-20, 28; and in chapter xxiii, verses 1-3, 6-8, 24, 25, 32. (*Arcana Cœlestia*, n. 9349.)

Now let us notice first of all that this passage, like the previous one quoted, is not treating specifically of the death penalty; it is treating of the way in which the Word is understood in heaven and in an internal church, and showing how this internal sense continues in force no matter what becomes of the meaning of the letter in application to external life on earth. The part of the letter which deals with the death penalty comes in, with a variety of other passages of the letter, simply as an illustration of the subject under consideration. Swedenborg took his illustrations from the thought of his own day because he had the people of his own day in mind as the readers whom he was addressing in his writings. We should always bear this in mind when we are reading, and especially when we are thinking of the assurance that he has given us, that he never received anything that pertains to the doctrines of the New Church from any angel, but from the Lord alone while he read the Word (*True Christian Religion*, n. 779). The doctrines of the New Church are of the internal sense of the Word, in full agreement with the truths given by the Lord in the internal sense of the Word to the angels. Therefore they are characterized

by Swedenborg himself as "angelic wisdom" and called "heavenly doctrines." And for this very reason the illustrations which he employed in explaining them to men in this world, drawn from natural science and from the letter of the Word, should not be classed with what he received from the Lord alone while reading the Word. He receive them (the illustrations) by the efforts of his own earthly reason.

The use of the extract from the "*Arcana Cœlestia*," above quoted, and especially the illustrations found in it incidentally, to show that the death penalty is forever mandatory upon New-Churchmen, called out a *reply* which is printed in this number of the REVIEW under the title, "Doctrine,—A Fragment," and which might be entitled, "The Use of Fragments of Doctrine, Illustrated in a Discussion of the Death Penalty." The passage of Scripture which had been singled out from many that Swedenborg used as illustrations of what had not been abrogated in the letter, and of what ought altogether to be observed and done, follows:

"He that smiteth a man, so that he die, shall surely be put to death" (Exodus xxi, 12).

The *reply* objected to the reason urged for the enforcement of this Old-Testament law of retaliation, "An eye for an eye, a tooth for a tooth, a life for a life," when the Lord in the Sermon on the Mount expressly abrogated it, at least in spirit, for the Christian Church. But we must not forget that this law had its origin in the Golden Rule, the law of charity which in heaven brings back upon the doer the blessings which he bestows upon his neighbor (*Arcana Cœlestia*, n. 1011). So in hell the law, by necessity, is reversed and the evil intended to another must return in equal measure upon the evil-doer. In the plane of the hells on earth, therefore, the death penalty may be regarded as a necessity of Divine order in the government of the evil; and inasmuch as there is a substratum of evil in the natural proprium of every one now, it may be a wholesome thing to have the horror of the death penalty associated with all our thoughts of murder to add to the horror and dread of that crime in earthly society.

But the *reply* calls attention to other difficulties found in the consideration of other passages "not abrogated," namely:

"He that smiteth his father, or his mother, shall be surely put to death" (Exodus xxi, 15). (Notice that the words, "so that he die," are omitted.)

"Thou shalt not suffer a witch to live" (Exodus xxii, 18).

The presence of these passages among those "not abrogated" and "to be wholly observed and done" is accounted for by the *reply* upon the theory that these laws were still in force in Sweden and other nations of Europe in Swedenborg's day. Hence they should be obeyed as long as they remained upon the statute books; but when they should be removed by the progress of Christian civilization they would at the same time be transferred from one of Swedenborg's classes to another.

This explanation was new to most of the members of the New-Church Club. And it seemed to be justified in the passage of the "Arcana" under consideration, saying, "some have been abrogated as to use at this day," but others not; and also by the following: "There are some which are still in force both in their external and internal sense; some which ought to be wholly observed in their external sense" (White Horse, n. 13). It will be interesting to test it by endeavoring to find out the facts about the other passages of Scripture which Swedenborg mentions as not abrogated, as to whether they may be found in the statute books of Sweden and other European nations of that time. A doubt arises in our minds about one of the earliest mentioned, for Swedenborg includes as we should expect most of the verses containing the Ten Commandments among those which have not been abrogated; but he omits from that list the following concerning the Sabbath:

"Six days shalt thou labor, and do all thy work: but the seventh is the Sabbath of the Lord thy God: in it thou shalt not do any work, thou, nor thy son, nor thy daughter," and so forth (Exodus xx, 9, 10).

It would seem that there must have been laws in Sweden forbidding week-day work on the Sabbath in those days, as there are in this country even now. And if so it must raise a doubt with regard to the theory of interpretation proposed.

We wonder on the other hand if there was any law in Sweden which would lead Swedenborg to include the following among the verses which had not been abrogated, or if he was not led to include it because it is a part of the universal Bible law against idolatry:

"Ye shall not make with me gods of silver, neither shall ye make unto you gods of gold" (Exodus xx, 23).

Turning to the next chapter we find difficulties to meet under any theory of interpretation. For first we have as not abrogated this: "He that smiteth a man, so that he die, shall surely be put to death" (Exodus xxi, 12). But the next verse seems to be entirely ignored, not being mentioned in any of the three classes: "And if a man lie not in wait, but God deliver him into his hand; then I will appoint thee a place whither he shall flee" (Exodus xxi, 13). Thus no mercy is to be shown to those who kill without deliberate intent. But the next verse is included as not abrogated: "But if a man come presumptuously upon his neighbor, to slay him with guile; thou shalt take him from mine altar, that he may die" (Exodus xxi, 14). It would seem that the omission of verse 13 might have been by accident, an oversight. But this is included as we have seen: "And he that smiteth father, or mother, shall surely be put to death" (Exodus xxi, 15). And this: "And if a man smite his servant, or his maid, with a rod, and he die under his hand; he shall surely be punished" (Exodus xxi, 20). We are not told whether by death or not, for the next verse is abrogated: "Notwithstanding, if he continue a day or two, he shall not be punished: for he is his money" (Exodus xxi, 21). The former verse, which is not abrogated and ought to be altogether observed and done, refers to owning slaves of the children of strangers, and allows beating them severely, but not to death. We cannot believe that this law was in force in Sweden when Swedenborg wrote.

In chapter xxii we read the following which have not been abrogated: "Thou shalt not suffer a witch to live" (v. 18). "Whosoever lieth with a beast shall surely be put to death" (v. 19). "He that sacrificeth unto any God, save unto

Jehovah only, shall be utterly destroyed" (v. 20). "Thou shalt not revile the Gods [margin: judges], nor curse a ruler of thy people" (v. 28).

In the next chapter, xxiii, two verses which are not abrogated refer to relations with the Amorites, the Hittites, the Perrizites, the Canaanites, the Hivites, and the Jebusites; and as there was no possibility of such a thing in the 18th century in Sweden no such law could have existed. Why then under this theory did Swedenborg say that it had not been abrogated? It reads in the letter of the Scripture: "Thou shalt not bow down to their gods, nor serve them, nor do after their works, but thou shalt utterly overthrow them, and quite break down their images. And ye shall serve the Lord your God, and he shall bless thy bread, and thy water; and I will take sickness away from the midst of thee" (vv. 24, 25). "Thou shalt make no covenant with them, nor with their gods" (v. 32).

Thus there are difficulties which are not met by this theory of interpretation, nor can we see how they can be met by any other theory. But manifestly the reply is right in its main contention that it is misleading to make a fragmentary use of the writings of Swedenborg. If we cannot make a rational use of all these passages in application to civil life, we are not justified in selecting one of them as an argument in favor of the death penalty. We may conclude that Swedenborg was thinking of the spiritual sense more than of the natural when he selected a number of them as illustrations of the parts of the letter of the Word which had not been abrogated by the change from the Hebrew to the Christian dispensation. But however that may be, we must reach the conclusion that illustrations should not be overvalued and mistaken for the doctrines themselves which they are intended to illustrate; for, in this instance, in introducing these references to Exodus Swedenborg distinctly says, "Let us take *for illustration* the laws, the judgments, and the statutes which are recorded in the aforesaid chapters." And then he proceeds to classify his illustrations.

But defects in illustrations which Swedenborg derived

from the conditions of earthly life about him, and not as matters of doctrine from the Lord, do not make the doctrines taught less true and reliable. In this case the teaching of this number of the "Arcana," that there is a spiritual meaning within the letter of the Word itself which the angels understand in relation to spiritual life, and which the New Church on earth, being an internal church, is to understand in harmony with the truths of heaven, is perfectly clear and can be rationally understood, and believed, and made practically useful for spiritual purposes; and the spiritual principles thus derived can be applied to the changing civil and moral conditions of every age in the rational light of this world. For the civil and moral conditions are sure to be ever changing and to require changing applications of unchanging spiritual principles in the progress of Christian civilization.

The fact that, on the planet Jupiter, one who only thinks evil of the Lord in His Divine Humanity is put to death, as described by Swedenborg (*Earths in the Universe*, n. 68), and that on another planet one who does wickedly loses his life (*Ibid.* n. 154), cannot be used as an argument for capital punishment on this earth, for the conditions are utterly different, internally and externally. The inhabitants of those planets are in open communication with the spiritual world as the men of this earth were before the flood. And when they think or do wrong they are not put to death by their fellows, but by "chastising spirits" who cause them to die either of suffocation like the men in the time (or state) represented by the flood in the Scriptures, or in a swoon; so that it is not capital punishment at all in our meaning of the word, but it is dying under the Divine Providence when the right time has come. They have no written revelation but are instructed by spirits and angels instead, from day to day as they need it. The reason that they die in this way is the universal one applying to all punishments, namely, for the protection of society and for their own eternal good; but it is not to protect society from physical death: it is to protect it from spiritual disease and death. And let us not for a

moment mistake these chastising spirits for angels, even of death. Swedenborg describes them as black and terrible in appearance and of a most cruel disposition; and the people to whom they come call them devils. When they begin to punish they find such pleasure in torturing others that they say that they would delight to go on with it forever; but they are restrained by the angels from going beyond what is perfectly useful to the sufferer, and so to society or the *maximus homo*. (Arcana Cœlestia, nn. 7803, 10,383.)

It is to be remembered most carefully when we consider the subject of punishments of whatever kind, that the Lord and the angels never punish—they cannot; they can only watch over and restrain in unchanging love and mercy to save as much as possible from suffering and death those who bring punishments upon themselves.

And this is certainly the work of the Christian Church in all conditions of earthly disorder, to come in the name of the Lord, not to condemn, but to save the world in the wisest possible way in the light and love of heavenly principles, and in the rational light of the age in which it lives. It may see that the death penalty is necessary for the protection of society for a long time to come in some parts of the world; but it never can be engaged with the world in administering that penalty, because the Lord and the angels cannot.

This is taught in the following:

That the Israelites and the Jews destroyed the nations of the land of Canaan was because they represented spiritual and heavenly things, and the nations represented infernal and diabolical things which can never be together with the spiritual and heavenly, for they are opposites. The reason why it was permitted the Israelites to destroy the nations was, that with them there was not a church but only the representative of a church, and consequently the Lord was not present with them except only representatively; for they were in externals without an internal, that is, they were in a worship representative of good and truth, but were not in good and truth. To such it is permitted to destroy, to kill, to exterminate, and to devote to destruction; but it is not permitted to those who are in externals and at the same time in internals, since they must act from good, and good is from the Lord. (Arcana Cœlestia, n. 9320.)

H. C. H.

A SKETCH OF THE MASSACHUSETTS NEW-CHURCH UNION.

HISTORICALLY the origin of the Massachusetts New-Church Union is to be traced back to the autumn of 1859, when "some of the younger members of the Boston society commenced holding weekly meetings [in the vestry of the Church on Saturday evenings] for the purpose of reading and conversing upon the writings of the Church, with a view of promoting social acquaintance, as well as of mutual improvement." In the following January some of these young men were instrumental in inducing Mr. George Phinney, the publisher of the *New Jerusalem Magazine* and the *New-Church Magazine for Children*, to move his book-store from 19 Winter Street to 21 Bromfield Street, on the understanding that certain of the rooms at the latter place would be rented from him for general New-Church purposes. Mr. Phinney announced his removal in the *New Jerusalem Messenger* of January 28; and a public announcement of the establishment of the rooms was made through a half-column advertisement in the same paper of February 18. This notice read in part as follows:—

New-Church Library, Reading and Publication Rooms in Boston.

For many years past a want has been felt by New Church people resident in Boston and vicinity for a common center, where on week days they could resort, and both introduce and meet people from a distance; and where New Church books and periodicals could be found, civilities interchanged, and various social uses be promoted.

In order to meet this want, the rooms *No. 21 Bromfield street*, formerly occupied by the American Unitarian Association, have been secured for a term of years. . . . The Committee having them in charge . . . cordially invite *all persons interested in the Church, both Ladies and Gentlemen*, whether visitors in Boston or residents, to resort to them freely, and enjoy all their privileges.

The maintenance of the rooms and their uses soon necessitated a permanent plan of organization, which led to

the formation of the "Boston New-Church Union" on June 7, 1860, at which time seventy gentlemen of Boston and the vicinity signed the constitution. According to this constitution "the objects of the Union shall be to maintain in Boston a New-Church Library and Reading Room, and to perform such other uses as the Union shall deem appropriate."

The rooms of the Union speedily became an active centre of New-Church work, largely missionary in character; to such an extent indeed that the finances of the Union (which was incorporated in 1864) were inadequate for the efficient carrying on of this work. Consequently at the annual meeting held on March 26, 1867, it was voted "to present to the Massachusetts Association a statement of conditions and prospects," and to solicit the assistance of the Association, in case the uses performed seemed to warrant it. This was done at the meeting of the Association held on April 4. The appeal led to a favorable response; and committees were forthwith appointed by both bodies to promote the contemplated adoption of the Union by the Association. In due time the alliance was effected; and on June 9, 1868, the name of the Union was changed, in accordance with legislative enactment, to the "Massachusetts New-Church Union." From that time the Union has been the legal body for carrying into effect the objects of the Association; and its rooms have served as the "headquarters for all the interests of the Church" within the limits of the Association.

As from the outset the fundamental purpose of the Union was the establishment of a New-Church Library and Reading Room, it is not without interest that we learn that a collection of long unused books that had belonged to "The Second Social Library of the City of Boston, or The Boston Library of the New Jerusalem," * incorporated in 1824 though origi-

*In the Record Book of this Library, under date of Sept. 5, 1826, we find the following interesting item, which implies that the beginnings of the Library go back to a date earlier than 1824:—

"The Librarian requested the advice of the Board in relation to a representation of Mr. Thos. Worcester, who claimed the privileges of a Life-Member, on account of books deposited many years ago; but whose name had not been inserted in the books. The titles and value

nally established some years earlier, was presented to the Committee first having charge of the rooms at Bromfield Street, and served as the nucleus of all subsequent growth. The expenses incurred in fitting up and maintaining the rooms left nothing for the purchase of books during the early months of its existence, however, though at the outset the current New-Church periodicals had been subscribed for. But friends soon began to make donations to the library, so that in March of the following year (1861) it was reported that there were 283 volumes in the collection, "including complete sets of Swedenborg's Theological writings." Apparently in addition to this number still other volumes had been deposited in the Library, for loaning at the discretion of the Committee; and these evidently furnished the nucleus of the circulating collection. The library as a whole, however, grew so slowly, and the need of important books was such, that at the annual meeting in March, 1863, a special committee was appointed to solicit both contributions of books and subscriptions to a library fund. The matter was also brought before the Massachusetts Association at its meeting the following month, with the result that a committee consisting of one member from each society was appointed to cooperate in the undertaking. So much interest throughout the Association was aroused at this time, that during the following year over \$2,000 were subscribed to the Library Fund; so that the treasurer was able to report on May 9, 1864, that of a total of \$2120 subscribed, \$1935 had already been paid in. With this amount available, the library was speedily enriched by valuable accessions; but as the successive annual purchases usually exceeded the income from the fund, the principal was repeatedly drawn upon, and in

of the books deposited were stated, and the circumstances explained by the Secretary; and the following Resolution, offered by Mr. [Sampson] Reed, was unanimously agreed to.

"Resolved—that it is the sense of this board, that Mr. Thomas Worcester, in consideration of books deposited in this Library when it was originally established [this could hardly have been earlier than 1817 or 1818], is in equity entitled to the privileges of a Life-Subscriber."

spite of additional contributions from time to time, tended to decrease with the passing of the years. The Library Fund lasted nearly half a century, however, its final depletion being reported only a year ago. At the present time the library of the Union numbers about 2400 volumes in its reference collection, besides 600 or more pamphlets (not including unbound periodicals); while its circulating collection consists of about 775 volumes. Of course its greatest treasures are copies of the original editions of Swedenborg's works of all kinds, of which, with one or two rare exceptions, it has a complete collection, mostly purchased in 1871-1872.

When the Bromfield Street rooms were first opened, Mr. Phinney was paid a certain amount annually for their care, and for attending to the needs of visitors when none of the members were in charge. The rooms were used to such an extent, however, and the opportunity of doing effective missionary work with strangers who came in to make inquiries or to borrow books was such, that at the meeting of May 9, 1864, the Standing Committee voted to try to raise money for the employment of a suitable librarian. Such a person was soon secured; and from that time to the present the Union has had one or more persons constantly in its employ. Naturally, after the Union had been adopted by the Association, the field for its operations became as wide as the bounds of the Association. It was inevitable, therefore, that efforts at missionary work should be made throughout this territory; and in consequence one or more clergymen were soon in constant employment in missionary and colportage work. Still another important use, that of assisting feeble societies in their support of a minister, was also recognized. In a few years, however, the duty of caring for the needs of feeble societies and of supervising the work of the missionaries, was transferred to that special committee of the Association, known as the Missionary Board.

After ten years of tenancy at its Bromfield Street rooms, the Union was unable to renew its lease except at greatly increased rent, and therefore moved to new quarters. As this involved separation from Mr. Phinney's book-store, it

was soon found desirable to carry a supply of New-Church literature for sale at the new rooms; and from this time a part of its property consisted of such stock. About the same time it entered also upon the publishing field; for from the time (1869) when one of the two missionaries of the Massachusetts Association became managing editor of the *New Jerusalem Magazine*, that periodical, and its successor, THE NEW-CHURCH REVIEW, have been published from the rooms. Another decade, however, seems to have passed before the Union undertook the publication of books. Perhaps its first step in this direction was due to a gift of the plates and unbound sheets of certain works by Mrs. Mary G. Ware, at which time (early in the eighties) a new supply of these books was put on the market. But in 1883 the Union established a printing-plant of its own, primarily with a view to reducing the cost of getting out the magazines it was publishing; and forthwith it was in a position to undertake book-publishing in the full sense of the term. The first book set, printed, and published seems to have been Rev. John Worcester's "Journey in Palestine"; and from that time more collateral works by that author than by any other bore the imprint of the Union. In 1885 and 1887 the New-Church publications controlled by the older Boston houses of Otis Clapp and the Carters were acquired either by purchase or by gift; and from the latter year the Union has been the sole New-Church book-store in Boston. In 1890 agreements were entered into, by which it became the publisher of the Rotch edition of Swedenborg's works. In 1901, after eighteen years ownership by the Union, the printing-plant was sold out to its foreman. This did not interfere with the publishing work of the Union, however, which went on about as before.

We have already referred to the fact that in 1869, when threatened with an increase of rent, the Union moved to new quarters. These were up one flight at No 2 Hamilton Place, and were opened on Dec. 28 of that year. Ten years later (1879), it moved again, this time to the second floor of its own building at 169 Tremont Street, which had been purchased with money bequeathed to it by Eliza Jenkins of

Scituate. Through the following decade the noise of traffic in this important thoroughfare steadily increased, so that it seemed desirable to seek a quieter habitation; and after prolonged consideration, the final steps to this end were taken in the early part of 1891, when apparently within the same month the Tremont Street building was sold and the property at 16 Arlington Street was purchased. After peaceful occupancy of the second floor of the latter building for about twenty years, the Union received certain overtures from a committee of the Boston Society, which had in view the Union's occupancy of the Wilkins property owned by the Boston Society, at 134 Bowdoin Street. This led in due time to an agreement whereby the Society was to prepare the Wilkins building so that the Union might have a new store and a new reading-room on the ground floor. These the Union has just moved into; and this issue of the *NEW-CHURCH REVIEW* is published from the new rooms. Strange to say, the Union has by this move fulfilled a prediction of its president of forty-four years ago; for in the annual reports dated March 30, 1869, when speaking of the necessity the Union was under of securing new quarters at the expiration of the lease then in force, and referring to certain locations that had been under consideration, we find him saying:

Subsequently, the trustees who hold the Wilkins estate on Bowdoin Street made some proposals to this Committee with regard to their leasing the estate for the use of the Union; but as this plan, too, would involve a large expenditure for alterations, it has been held in abeyance, with little probability that it could be adopted. It may, however, be presented to us under another arrangement, which may make it desirable for us to go there.

Doubtless the president at that time was not looking forward beyond the current year; and he certainly would have been amused, could he have foreseen the realization of his prediction after more than forty years had passed.

This sketch is already too long, though much more could readily be said. In bringing it to a close, since the purposes of the original founders of the Union are still in force, the *REVIEW* can hardly do better, when going forth for the first

time from these new quarters, than to repeat the invitation contained in the announcement of the establishment of the rooms in 1860: "*All persons interested in the Church, both Ladies and Gentlemen*, whether visitors in Boston or residents, are cordially invited to resort to them freely, and enjoy all their privileges."

B. A. W.

BIBLICAL AND DOCTRINAL STUDIES.

THE LORD'S PRESENCE IN THE HOLY SUPPER: A STUDY OF LUKE XXII, 19, 20.

"AND he took bread, and gave thanks, and brake it, and gave unto them, saying, This is my body which is given for you: this do in remembrance of me. Likewise also the cup after supper, saying, This cup is the new testament in my blood, which is shed for you."
—*Luke xxii, 19, 20.*

WHAT did the Lord mean by speaking so of His body and His blood in the Holy Supper? There have been many answers to this question in the Christian Church, expressing some degree of understanding of the Lord's words, but no followers of the Lord have grasped or dared to grasp all that the Lord meant by this saying about His body and blood.

Some have seen in the words a reference to the Lord's crucifixion, and to all the trials and sufferings which He endured for men. And this may mean much or little: little if they think only of the physical suffering of the cross, and regard this as suffered for them and in their place; or much if they think of all that the Lord endured for men in sharing their nature weak and open to the assaults of evil, meeting and overcoming all, that He might give men His protection and power to overcome. Any such thought of the Lord in the Holy Supper, and of what He did in His great love for us, is so far right, and makes the keeping of the Holy Supper effective. In our doctrine we find the earnest advice to those who can think of these things only in a very simple way, when they take the bread and the wine, and then hear them called the Lord's flesh and blood, to think of the Holy Supper as being the holiest thing of worship, and to keep in remembrance Christ's passion and His love for man's salvation. (See *True Christian Religion*, n. 709.) The Holy Supper is

effective of good, if kept in a simple thought of the Lord's passion; but this is far from a full and adequate understanding of the Lord's saying that the bread and wine of the Holy Supper are His body and blood. So are all ideas of the Holy Supper inadequate in which the Sacrament and its bread and wine are regarded simply as a memorial, or a reminder, or a representative of the Lord.

In contrast with such understandings of the Lord's words, we have the teaching of the Catholic Church, that the bread of the Holy Supper is in the sacred service at the altar changed by a miracle into the Lord's body, and that the wine is changed by a miracle into the Lord's blood. They teach that the Lord meant what He said when He gave the bread, saying, This is my body; and that He meant what He said when He gave the cup, saying, This is my blood; and they believe that by a miracle which the Lord then wrought and which He gives His priests power to work, the bread which is taken by the people and the wine which is taken by the priests, are the Lord's physical body and blood. We must honor the effort to take the Lord at His word; to believe that He meant what He said, not trying to explain it away; but the result is still inadequate, if the thought rises no higher than physical flesh and blood, taking the Lord's words only in their lowest, material meaning.

"There is a natural body, and there is a spiritual body," the apostle teaches; there are natural flesh and blood, and there are spiritual flesh and blood, and in the Lord there are Divine flesh and blood. The spiritual flesh is love, which is the soul's substance and strength; the spiritual blood is the living current of thought. These are one's very self. These are vastly more than material flesh and blood. They are more real, more living, more enduring. Moreover these elements of the soul's life, its love and its thought, one can impart to others, and others can receive his gifts and find their life made stronger by them.

And so too the Lord's body and blood, only in the lowest, least important sense, could mean the material body and blood in which His Divine life was clothed when He walked

on earth; in a fuller and more real sense it must mean His Divine love, the essence and strength of His life, and the living, life-giving current of His Divine thought. These in a much fuller, truer sense are the Lord's body and blood. And moreover these He can impart; and our truly human, heavenly life depends upon our receiving these elements of life from Him.

Earlier in His ministry the Lord had spoken to the disciples about bread, saying, "Take heed and beware of the leaven of the Pharisees and of the Sadducees." And when they thought it was because they had neglected to take with them natural food, He said almost reproachfully, "How is it that ye do not understand that I spake it not to you concerning bread," and at last they understood that He had warned them of the doctrine of the Pharisees and of the Sadducees. (Matt. xvi, 6-12.) And at another time the Lord taught, and more fully than at the table of the Last Supper, of the necessity for eating His flesh and drinking His blood. He introduced the teaching by a warning not to take what He was about to say, in a material, but in a more real, a more important, a spiritual way: "Labor not for the meat which perisheth, but for that meat which endureth unto everlasting life, which the Son of man shall give unto you." And He continued, "I am the bread of life: he that cometh to me shall never hunger; and he that believeth on me shall never thirst." How plainly the Lord is still speaking of the nourishing of the soul from His life; for coming to the Lord is loving Him and obeying Him, receiving His love in the heart and life; and this is said to satisfy the hunger; and to believe in Him, is to receive His truth in the understanding; and this is said to satisfy the thirst. Surely we must continue this thought of the feeding and refreshing of the soul from the exhaustless fountain of His love and truth, as the Lord goes on to say, "I am the living bread which came down from heaven: if any man eat of this bread, he shall live for ever. . . . Except ye eat the flesh of the Son of man, and drink His blood, ye have no life in you. Whoso eateth my flesh, and drinketh my blood, hath eternal life; and I will

raise him up at the last day. For my flesh is meat indeed, and my blood is drink indeed. He that eateth my flesh, and drinketh my blood, dwelleth in me, and I in him. As the living Father hath sent me, and I live by the Father [the Father is the Divine love]; so he that eateth me, even he shall live by me [by the love that He gives from His own heart to ours]." And then, when many of His disciples said, "This is a hard saying; who can hear it?" the Lord answered, "It is the spirit that quickeneth; the flesh profiteth nothing." (John vi, 51-63.)

This instruction given earlier in the Lord's ministry, should have helped the disciples, and should help us to understand His words at the table of the Last Supper. It should save us from thinking only of His material body and blood when He passed the bread and wine and called them by these names, and should lift our thought to the more real, more living body and blood of His own mighty love, and the living current of His thought, which He offers, to make our souls alive. The Lord meant what He said when he declared of the bread, "This is my body," and of the wine, "This is my blood"; but He meant it not in the lowest, least important sense of the words, but in the highest, the fullest, the most living sense. To have any earnest thought of the Lord in the Holy Supper is useful. But to think that it is merely a memorial and representative of Him is not the best that we can do, to think that the bread and wine are His material flesh and blood, is not the best; for we can know the truth, the far grander, far more wonderful, far more blessed truth, that the Lord is present in the Holy Supper, offering to us His own love and truth, the elements of all strong, true, blessed life.

But if His body and blood which the Lord gives in the Holy Supper are spiritual; if they are love for what is good, and understanding of what is true; what need is there for the material bread and wine, or for any natural observance of the Sacrament? It is a universal law, that power is in ultimates. A feeling or a thought needs expression in word and deed to make it effective, and to make it permanent; it needs this to prove it and oftentimes to make it real. The principle

underlies modern ideas of education. Devout feelings and thoughts need to be expressed in worship, or they may pass away like vapors. So there is need for a time and place for worship, for the Sabbath day and for the Church, and the orderly exercises of worship; they are the basis, which gives reality and permanence to the worship of the soul. And this is true in a full and special sense of the two Sacraments, Baptism and the Holy Supper; for these are Divinely appointed acts, forming perfect vessels for the spiritual things which are within them. The act of taking reverently the bread and wine is a basis, a containing vessel which powerfully assists the reception of the love and truth which the Lord desires in the Holy Supper to impart for our eternal life.

There is a use, a real, practical use, a use greater than we can know in reverently keeping the Holy Supper with the Lord. And how shall we direct our thought and feeling in the service, to make it most effective? The thought must be of the Lord, and the desire must be to come into closer touch and more real relation with Him. As the bread of the Holy Supper is passed and taken, and His words are read; "This is my body," we can think of the Lord's great love revealed to us in the world about us, and so clearly and abundantly in His Word, especially in His coming into the world and in His blessed life with men; and we can recognize how weak and poor the love of our life has been, in our relations with others, in our work, in our worship. Confessing the Lord's great love and our need, we can desire that He will give us from His abundance, the love which will make our lives strong and useful, a blessing to ourselves and others. And as the wine is passed and we hear the Words, "This is my blood," we can think of the Lord's perfect wisdom, and not in any cold abstract way, but as the present living current of His thought; and we can reflect how ignorant we are in regard to the right ways of life; we may especially feel our ignorance and need of guidance in some new responsibility, some untried way; and every day is a new responsibility and an untried way, and we can ask the Lord to enlighten and guide us from His perfect wisdom.

Coming so to the Holy Supper, taking the bread and the wine in this thought and prayer, the Lord will feed — He does feed — us with His own body and blood, with His good love and His true thought, and we are made strong for His service in this world, and for heaven.

WM. L. WORCESTER.

THE INTERNAL SENSE OF THE WORD IN THE LIFE.

It is one thing to read the Word and another thing to make it a part of one's life so as to understand it, for it will not be understood unless its internal or significative sense is brought into the life. This is the key of knowledge to the wisdom of the Scriptures, as is fully illustrated in the life of Swedenborg, through whom the Lord revealed the living truth which constitutes the internal sense of the Word. So, too, it is one thing to know that the Word is holy and inspired, and a Divine revelation of the Lord, and another thing to know in what way it constitutes such a revelation.

Few in the Christian world understand the Word because few are willing to receive its internal sense, which the Lord revealed to his servant, and in which He explains the natural sense and makes all things new. It is in this sense that the angels understand the Word, and it is through this sense that the Lord gives the church power in the letter over the evils of life.

The reason why the Christian world does not receive the revelation given to Swedenborg is that its life does not correspond, and where the life is not in correspondence with spiritual truth there is no willingness to receive it. We read:—

Every church in the beginning is in good and thence in truths, or in charity and thence in faith, but afterwards it is in faith and thence in charity, and lastly in faith separated from charity; when it is in charity and thence in faith the church is spiritual, when it is in faith and thence in charity it is only rational, but when it is in faith separated from charity it is then only natural, and

a church merely natural is *no church*, for the merely natural man has respect only to himself, and not to the Lord and heaven, the latter being on his *lips* only but the former in his *heart*; and when the Church is such then it is consummated. (Apocalypse Explained, n. 929.)

The nature and importance of the internal sense of the Word are well illustrated by what is said of the different names by which the Lord is spoken of in the literal sense. These names, like all others mentioned in the Word, are not mere proper names, but each is expressive of some quality or attribute of the Lord's Divine as He is correspondentially therein to the recipient. In the Word all names are significative, and it is so also in the spiritual world. This is taught as follows:—

No other names are given to persons in the spiritual world than what are expressive of the quality of their affection and life. There the quality of every one is known from his name alone. Hence when the name of any one is pronounced by another and the quality which is understood by the name is loved, he becomes present, and they are conjoined as companions and brethren. But the quality of the Lord is the all of faith and love, whereby he effects man's salvation. . . . The name Jesus Christ also involves that quality. Jesus signifies salvation, and Christ or Messiah the Divine Truth which comprehends the all of faith and love as to knowledge, doctrine, and life. Hence, when these names are mentioned their quality is to be thought of and the life to be formed according thereto. For the Lord cannot be loved otherwise than by His quality. (Apocalypse Explained, n. 815.)

The practical importance of this teaching appears clearly from what is said elsewhere about the profanation of the Lord's name, and of the Word, as for example:—

The second commandment is "Thou shalt not profane the name of God." In the first place what is meant by "the name of God" shall be told, and afterwards what is meant by "profaning the name of God." The name of God means any quality by which God is worshipped. For God is in His own quality, and is His own quality. His essence is Divine Love; His quality is Divine Truth therefrom united with Divine Good; thus, with us on earth, it is the Word. Consequently, it is said in John, "The Word was with God and the Word was God." So, too, it is the doctrine of genuine truth and

good from the Word; for worship is according to that. Now as His quality is manifest, for it comprises all things that are from Him, so He has many names; and each name involves and expresses His quality in general and in particular. He is called Jehovah, Jehovah of Hosts, Lord, Lord Jehovah, God, Messiah or Christ, Jesus, Saviour, Redeemer, Creator, Former, Maker, King and the Holy One of Israel, Shiloh, Almighty, David, Prophet, Son of God and Son of Man. All these names are of the One God who is the Lord; and yet when they occur in the Word, they signify some universal divine attribute or quality distinct from other divine attributes or qualities. So, too, where He is called Father, Son, and Holy Spirit, three are not meant, but one God, that is, there are not three Divines but One, and this Trine which is One is the Lord.

Since each name signifies some distinct attribute or quality, "to profane the name of God" does not mean to profane His name itself, but His quality. Name signifies quality, for the reason that in heaven every one is named according to his quality, and so it is with all names in the Word; and the quality of God, or the Lord, is everything that is from Him by which he is worshipped. For this reason, since no Divine quality of the Lord is acknowledged in hell, the Lord cannot be named there; and in the spiritual world, His name cannot be uttered by any one except so far as his Divine is acknowledged, for there all speak from the heart, and thus from love and consequent acknowledgment. (*Apocalypse Explained*, n. 959.)

What evils are involved in the profanation of the name of God in His Word, and the direful consequences of such profanation are thus described:—

Since the name of God means that which is from God and which is God, and this is called "Divine Truth," and with us the Word, this must not be profaned, because it is in itself Divine and most holy; and it is profaned when its holiness is denied, which is done when it is despised, rejected and treated contemptuously. When this is done heaven is closed, and man is left to hell. For, as the Word is the only medium of conjunction of heaven with the Church, so, when the Word is cast out of the heart, that conjunction is dissolved; and, because man is then left to hell, he no longer acknowledges any truth of the Church. (*Apocalypse Explained*, n. 960.)

To the same effect are passages in n. 962 of the same work, where is it further said that "the name of God is interiorly profaned by a life contrary to the commandments of the Decalogue."

If all the names of the Lord as given above were persons instead of qualities of the Lord's Divine or the Word, they would not be representative "but the things themselves." It is said if we remain in the mere names of the Word we will know nothing of the nature and purpose of the Word, nor of its quality, for it is the quality of the Word which reveals and teaches how it is to be understood.

That Lord as to His Divine Humanity is the Word, that is the Divine Truth, is declared in the plainest terms in John, "The Word was made flesh." This denotes that the Word was made the Human of the Divine Love, to save the human race from their selfhood with its evils and falsities thence derived.

Why the Word was written in the form in which it is, is thus clearly stated:—

The reason why the Word was thus written is, in order that the conjunction of heaven with men might be thus effected, and the ground of this conjunction is, that every expression therein, and in some passages every letter, contains a spiritual sense, in which the angels are. Wherefore when man perceives the Word according to the appearances of truth therein, the angels who are about man understand it spiritually. Thus, the spiritual principle of heaven is conjoined with the natural principle of the world with respect to such things as conduce to man's life after death. If the Word had been written otherwise no conjunction of heaven with man could have been effected. (*Apocalypse Explained*, n. 816.)

It thus appears that the Word was given in such form that it would correspond with man's internal state. If it had not been given in correspondence with his internal state, it would not have been received, and therefore would have been of no use in his regeneration. The Word in its integrity treats of the regeneration of man, and thence of the glorification of the Lord, as in John v, 7, 8, "If ye abide in me and my words abide in you ye shall ask what ye will and it shall be done unto you. Herein is my Father glorified that ye bear much fruit; so shall ye be my disciples."

D. L. THOMPSON.

THE CHURCH—UNIVERSAL, VISIBLE AND INVISIBLE.

THE church of the Lord is scattered over the whole terrestrial globe, and thus is universal. All they are in it who have lived in the good of charity according to their religious belief. (Heaven and Hell, n. 328.)

At any given time, the church universal is a body larger than, and inclusive of, that part of the specific church then existing upon earth, the specific church being "where the Lord is acknowledged and where the Word is." (Heavenly Doctrine, n. 242.) But the specific church in heaven and on earth considered as a whole is vastly larger than the church universal on earth; for in heaven no one can be of the church universal and not be of the specific church. Every one in heaven before entering it has become, either in this world or in the intermediate one, a member of the specific church.

At no time does there exist upon earth more than one specific church. When one specific church follows another, doctrinal differences distinguish it from its predecessor. The doctrines of any specific church are perfectly adapted to the needs of its time. For instance, one thing which characterizes the time in which we live is the spirit of modern science. This spirit precludes the acceptance of the Bible as God's Word unless it be known that in it throughout there is a heavenly meaning for the sake of which the letter exists as a vehicle; for the spirit of modern science sees that the letter alone in many places contradicts itself; in many places is mere history, unprofitable for spiritual development; in many places enjoins what is impossible for useful application in modern life; and in many places teaches what is irrational. The universal theology revealed in the "True Christian Religion" is adapted with infinite perfection to the needs of the spirit of modern science. In the light of that theology we can see the letter of God's written Word as a vehicle for the spiritual meaning which obtains in it throughout—a meaning at no point contradictory of itself; at every point applicable to modern

and to all future life whether on earth or in heaven; and throughout divinely rational in its teachings.

The need of the revelation of this universal theology was absolute. The second coming of the Lord was essential to the continuance of the race, and indeed of the created universe, no less than the first coming. (True Christian Religion, n. 182.) When the Lord came the first time the influence of the hells over man had become so great that they were on the point of gaining absolute control over him, and he would have been unable to resist them; the freedom of his will would have been destroyed. With his freedom of will destroyed man himself would have been destroyed. The heavens rest upon man on earth. With man on earth destroyed, the heavens themselves would have perished; and not the heavens only but all created things would have perished with them. Every object in the animal, vegetable, and mineral kingdom was created and exists for the sake of something in man corresponding to it. God in creating, first forms an outmost, then working from Himself as a centre builds up what is intermediate. In the creation of any faculty or part in man, He first forms that particular in the outmost of nature necessary to that faculty or part, and then, working from Himself and with that outmost, forms the faculty or part. In this series the end is the faculty or part in man; the cause is God; the effect is the object in the animal, vegetable, or mineral kingdom. Sustentation is perpetual creation. We can see, then, that if man had been destroyed every object in the created universe and the very heavens themselves would have ceased to exist. The incarnation, by which alone God could overcome the hells, and so deliver man, was absolutely essential to their continuance. No less true is it that when need was for the second coming that coming was essential to the continuance of the race in heaven and on earth and of everything in the created universe.

The pivotal thought of the specific church of today is that "the Lord God Jesus Christ reigns, whose kingdom shall be for ages of ages, according to the prediction by Daniel (vii, 13, 14), and in the Apocalypse (xi, 15); and that Blessed are

they who come to the marriage supper of the Lamb (Apoc. xix, 9)." This quotation is from the "True Christian Religion," n. 791, and sets forth the Gospel which the Lord sent His twelve disciples to preach throughout the spiritual world when the "True Christian Religion" had been published upon the earth. It is interesting, in this connection, to recall the beautiful appearances that were seen in the angelic heaven from east to west and from north to south, expressing the assent and joy of the New Heaven when the "Brief Exposition of the Doctrine of the New Church" was published. (See Tafel's Documents, vol. ii, p. 281.) Here again is evidenced the principle above noted, that God works from inmosts through outmosts to build up intermediates. In this series the end was the enlightenment of the spirits of men on earth and of men throughout the spiritual world; the cause was the Infinite Love; the effect was the publication of the "True Christian Religion, containing the Universal Theology of the New Church."

The church universal lacks such doctrinal form and organization as render the specific church, in its lower degrees, visible to men. That is why man cannot see the church universal. Let us, however, proceed carefully. Nothing can exist without definite form. The church universal has definite form, but its form is not discernible by men. When we say of a physical object, such as a cloud, that its outline is indistinct, we do not speak quite accurately. Every particle of the smoke or vapor has a definite outline; so too has the cloud as a whole. The outline is definite. The seeming vagueness or indistinctness is due to the limitations of the observer. The church universal as a body upon earth has form. That man cannot see it is due to his limitations. God sees the outward form of the church universal, and also, from inmosts, sees that church in the making, as He sees, from inmosts, everything in its making. He sees everything "in the beginning" when it is still "without form and void." From Him our substance is not hid when we are made in secret and curiously wrought in the lowest parts of the earth. His eyes behold our substance yet being imperfect; and in his book all our members are written, which in continuance are fashioned,

when as yet there are none of them. (Ps. cxxxix, 15, 16.) God sees the church universal, each member of which is a member, in the making, of the specific church; for in heaven, as we have seen, there is no universal church as distinguished from the specific church. The invisible church there is the Lord's Divine, which alone makes heaven. As the invisible God is within the visible God, within the heavens, and within nature, so the invisible God is within the visible church. So He is, too, within the church universal.

It remains to speak of the visible church. The specific church is visible by reason of doctrinal form and organization as a physical object is visible by reason not of its substance but of its shape. Some objects are visible by reason of their emitting light; some, by reason of their reflecting light. An object emitting light does not originate it, but transmits it from the source of all light. The internal church is visible by reason of light emitted in the essential doctrines of the Church—the doctrine of the Lord, the doctrine of the Sacred Scripture, the doctrine of Faith and the doctrine of Life. Every internal must have an external in which it can rest, and against which it can react, else the internal would be dissipated. God, for the sake of the internal church, organized the external church from what is without or below. Here again we have evidenced the principle already mentioned, that God works from inmosts into outmosts to build up intermediates. That the external church is made from what is without or below involves the assumption that, like man, it is weak and fallible; it reflects his frailty and imperfections. It is visible by reason of the light that it reflects. At the same time it transmits from the internal church, and thus of itself emits, the essential doctrines, by reason of emitting which the internal church is visible. In the following lines from Whittier's "Snowbound" is described a blending of what was reflected from a window-pane and what was transmitted through it:

"While radiant with a mimic flame
Outside the sparkling drift became,
And through the bare-boughed lilac tree
Our own warm hearth seemed blazing free."

As what was assumed at the incarnation both reflected the frailty of man and transmitted the perfection of the Father—else redemption could not have been effected—and as the letter of the Word reflects the frailty of man, and transmits the perfection of the Father—else the uses of the written Word could not be effected—so the external church, in order to effect its uses, must both reflect and transmit.

False doctrines pass away, and with them the specific church to which they were appropriate, but the church universal remains. This is represented by the fact that the kingdom of Israel passed out of existence, but that the kingdom of Judah persisted, and still persists, though its members are scattered over the face of the earth. It is also taught in the Lord's answer to Peter, who had asked respecting John, "Lord, and what shall this man do?" "If I will that he tarry till I come, what is that to thee? follow thou me." Each specific church which has preceded the present came to an end when it had served its purpose, and when the race, in the course of its development, had come to need doctrines which that church could not supply. The present specific church is final. It can no more come to an end than the church universal.

At any given time the invisible church finds expression upon earth both in a specific church and in the church universal. Only the specific church is visible to man. Its internal is visible only by reason of the light which it reflects—not by reason of the light which it transmits.

CHARLES S. MACK.

CURRENT LITERATURE.

THE NEW BOOK OF WORSHIP.*

Although the New Church as an ecclesiastical body is still young, a considerable volume might be written about its liturgical history. The last chapter of such a treatise would naturally concern itself with the new "Book of Worship" that has recently been published by order of the General Convention. Much might be written with regard to the successive steps that have led from the Convention liturgies of 1876 to the new volume; but we shall touch upon only a few of them, and upon these quite briefly.

It was inevitable that to many persons the three different liturgies of 1876 should not be entirely satisfactory; and it was natural that from time to time this dissatisfaction should express itself in various ways, and should seek to bring about the publication of a revised book that should supersede these three. The agitation had progressed sufficiently by 1892 for the Council of Ministers to appoint a special committee to consider the subject, "with a view to the improvement of the present book of worship and to the unification of our liturgical usages." This committee was to report progress from year to year; but for a number of years there was scarcely any. In 1900, however, an effort was made to have Convention authorize the publication of a modification of the Psalter Edition, in which complete orders of services for morning and evening worship should be printed at the be-

**Book of Worship*, Containing Services, Prayers, Sacraments and Rites, and a Complete Psalter with Chants. Prepared for the Use of the New Church, and Printed by Order of the General Convention, Journal of 1912, Minute 67. New York: New-Church Board of Publication. 1912. XXVI+693 pp., 16 mo. Cloth \$1.00; full morocco, full gilt edges, \$2.50.

ginning of the book; but after some discussion the matter was laid on the table. A year later the Committee on the Revision of the Liturgy was re-organized: and under a new chairman who was deeply interested in the matters involved, greater activity soon manifested itself. The first tangible fruit of the new activity was the publication of the modification of the Psalter Edition that had been sought a few years before. This has been known as the "Morning and Evening Services" edition. The next step taken involved the revision and extension of the prayers and thanksgivings, and also of the rites and sacraments, in the books then bearing the imprimatur of the General Convention; and subsequently the revision of the entire Psalter, and its setting to suitable chants, was called for. Two years later (1906), when the Council of Ministers reported that the prayers and rites had been carefully revised, and requested that the Convention authorize the printing of an edition for the examination of the ministers, the request was approved, leading to the appearance of the first tentative edition in 1907. A second tentative edition, revised and enlarged from the first, and set in larger type, was printed in 1910. By this time the revisions of the Psalter and of the Responsive Services were nearly completed; and as soon as they were ready, a final tentative edition was hurried through the press, so as to be presented to Convention at its session in Washington last year, for use at its services. The Convention then formally expressed great satisfaction in the new book; ordered the publication of the complete work after a final revision by the Committee; and recommended its use by all the societies affiliated with the national body. The final book is now before us, and has already been adopted by a large number of New-Church societies throughout the country.

Comparing the new volume with the various editions that it was intended to supplant, we have to note as the first novel feature the calendar of daily readings from the Word, followed by a supplementary calendar of daily doctrinal readings from Swedenborg's works, which together constitute the larger part of the introductory section of the book. The next

novel feature is the tables by which the calendar dates of Easter and other Special Days of the Christian Year may be ascertained for any year during the coming century. Then follow the Orders of Service for morning and evening worship, which vary very noticeably from the former Books of Worship of the General Convention, with the exception of the "Morning and Evening Services" edition, with which they are almost identical. The next four pages contain a reprint of the Sanctuses and Doxologies to which we have long been accustomed, and are followed by our familiar Responsive Services, revised, re-arranged, and extended by the addition of a new service entitled "The Second Coming." A transitional page to the Psalter consists of a special classified index to the selections and anthems that follow. Then comes the complete Psalter, divided into morning and evening readings for thirty days, and set to music throughout, the customary chants being for the most part retained, and additional ones being supplied for the Psalms not previously arranged for chanting. Selections from Other Portions of the Word come next, consisting for the most part of words and chants with which we have long been familiar. Immediately succeeding are the seventy pages of Anthems, reprinted from the old books,—a collection that, we have heard, came dangerously near being omitted. This brings us to that part of the volume which is in large part new to most of us, though in less degree to those who have been using the Psalter Edition and its later modification, which contain a considerable part of what is here found under the heading, The Collection of Prayers and Thanksgivings. This section, however, is followed by sixty-six pages, entitled "Prayers and Gospel Lessons for Sundays and Special Occasions," which are entirely new to the Convention liturgies. The succeeding parts, entitled "Sacraments and Rites," is based upon our former book of "Rites and Sacraments," which has been subjected to complete revision and considerable amplification (in part from the Convention liturgy of 1854), the details of which we will not here mention. Suitable indexes complete the volume, which totals 720 pages, of which perhaps a third are of new material.

To the question, Whence the new material? a very long answer might be given; but space compels us to be brief. As compared with the Boston and New York Editions of the 1876 "Book of Worship," the Psalter Edition was a distinct step towards our new Book: and the "Morning and Evening Services" Edition was still another step. As compared with the other 1876 editions, the Psalter Edition contained a fuller collection of prayers, including the Litany, and also the entire book of Psalms, arranged for morning and evening readings for a month. These pages were taken bodily from "A Prayer-Book and Hymnal for the Use of the New Church," published by J. B. Lippincott & Co. in 1867, the very plates of that volume being used. As compared with the Psalter Edition, the "Morning and Evening Services" Edition differed mainly in that characteristic which gave name to the later edition; namely, the Services printed at the beginning of the book. These were but abridgements of similar services in "The New Churchman's Prayer-Book and Hymnal," this being the title given to the second edition, revised and enlarged, of the above-mentioned book that was published by Lippincott in 1867. As already said, the opening pages of the "Morning and Evening Services" Edition differ but little from the similar pages at the beginning of our new Book.

Turning now to the Tentative Edition of our new Book as published in 1907, our readers will not be surprised to learn that, while some of the new material was derived from the Convention liturgy of 1854, by far the larger part of the new matter found in that volume (as compared with previous Convention issues) was taken bodily from the above-mentioned "New Churchman's Prayer-Book,"—indeed, was in large part printed from the same plates. By this means the Prayers and Gospel Lessons for Sundays and Special Occasions, as well as much other matter, were placed in the hands of all our ministers for their careful consideration. Most of this matter, in slightly revised form, is found in the new Book now in our hands. Another valuable feature of the "New Churchman's Prayer-Book" that is found in revised form in our new Book,—namely, the Calendar of Daily Lessons from the

Word,——did not appear in any of the tentative editions until the third was printed last year.

If, as compared with the earlier liturgies of Convention, the present volume is a blessing to the Church, and if the thanks of the Church are due to any one person more than to others for bringing it this blessing, that individual is certainly the Rev. Frank Sewall, compiler and editor of the Lippincott liturgies mentioned above, and since 1901 Chairman of the Committee on the Revision of the Liturgy. We make this personal reference because it is but honor due. Concerning the 1867 liturgy, Mr. Sewall has said that it was "prepared from the best historic sources," and was "undertaken with the sole desire of seeing the Church, by means of a more beautiful and orderly external worship, advanced in genuine piety and spiritual life." Surely the thanks of the Church are due him.

Personally we are glad that this volume contains a calendar of daily readings from the Word and from the writings of Swedenborg, because we believe that a scheme of this sort tends to cultivate the habit of daily Scripture reading by many persons who but for such aid might not form the habit. So far as we know, the doctrinal calendar is here published for the first time. To be sure, we may smile when we notice that but thirty-one brief readings from the "Arcana" are supposed to give us an idea of that voluminous work; but certain it is that a person who familiarizes himself with all the 366 group of passages here referred to, will have a reasonably comprehensive view of New-Church doctrines.

As to the Psalter, we are informed that with slight modifications, the Authorized Version has been used in this volume. Doubtless there were plenty of good reasons for the choice of this version; but may we not well ask, Why make a New-Church version of the Word, if no use is to be made of it?—a query prompted by the fact that a New-Church version of the Psalms was laboriously prepared by Convention's Committee on the Translation of the Word, and was published in 1906, the preface informing us that "this book was selected [to be translated first] so that a new translation might be at

the disposal of the Committee on Liturgy Revision, when it should be ready to prepare a new Liturgy."

As in the case of the Psalter Edition of 1876, the Psalms are divided into sixty groups, every other one of which is marked respectively for morning and evening use. While we see no objection to the division of the Psalms in such a way as to provide two groups for each day of the month, we do see a practical objection to designating the two groups by the words "Morning" and "Evening" respectively (when a Roman I and II would perhaps have served as well), since the word "Evening" at the beginning of a group is quite sufficient to dissuade from its use in the morning. As many of our societies regularly have only a morning service on Sunday, about half the Psalms are for this reason more or less completely neglected in the responsive readings at their worship.

With regard to the chanting much might be said. First of all, we have here an abandonment of the method, long prevalent in the Church, of singing the recitation to the chanting-note without assigning any special time to that note, in favor of the method in general use elsewhere which considers that from a certain syllable in each recitation (indicated by an accent mark) the strict time of the chanting-note is supposed to begin. While this change does not necessarily result in any difference in the way a certain passage is sung, yet it frequently does, and in such cases often in ways contrary to the principles of good declamation; for while the principle is here laid down that "good chanting should just be good declamation joined to good musical intonation," the assigning of definite time to the chanting-note tends to result at times in the hastening of the introductory words of a recitation, and at other times in the holding of a rhetorically unimportant word. But considering the method of chanting here adopted as the better, the question as to whether the pointing is always the best possible is open to different answers according to the judgments of the persons expressing opinions; for there are no inflexible principles to guide in the marking, and no two persons would solve all the prob-

blems alike. But enough! It is certain that this important change has not been made without due consideration, and that the details have not been worked out without care. One word more,—it would have been better if the point or points used between the syllables of a word had been on thin bodies, so as not to disjoint the word so conspicuously; for the spaces in the bodies of the words do tend to interfere somewhat with the smoothness of the reading, especially when the syllables thus disjointed form complete words by themselves, as is often the case.

In the use of the book, a practical defect is felt whenever a selection for chanting is in such a position as to necessitate the turning of a page, and the music is not repeated. We understand that such repetitions of the music were disapproved on account of space. But in our judgment this was poor economy; for it seems to us that adaptability to singing by congregation and by volunteer choir should have been the controlling principle; and this certainly calls for the repetition of the music in such cases, so as to avoid needless difficulties.

We were informed last year that a considerable part of the Tentative Edition then presented to Convention had been hurried into type, and was therefore hardly free from errors. We are sorry to say that in some particulars the present book also shows signs of haste, or at least of some lack of care in proof-reading and revising. A considerable number of such instances have come to the attention of the present reviewer, but it is hardly worth while to itemize them here.

But after all is said by way of adverse comment, we are quite convinced that the present volume is a marked improvement over the old ones; and we rejoice that in the interests of uniformity, and in response to appeals to get together, so many of our societies have adopted the work. As the volume has much in it that also adapts it to private use at home, we hope that many individuals will make such use of it, so as to become more and more familiar with the contents; for the greatest benefit to be derived by the individual from the use of such an aid to public worship as this is, depends upon a

familiarity that enables the external form to serve most completely as a means of spiritualizing the entire service. The spiritual uplift from public worship is greatly enhanced by thorough familiarity with the forms used, and especially so when these are in themselves beautiful.

B. A. W.

A NEW DOCTRINAL MANUAL.*

As its title indicates, the book before us is intended to make known "What the New Church Stands For;" and though some New-Churchmen may be inclined to take some exception to the way a few things are put (for instance, what the author says in his Introduction about the New Church upon the earth, implies that he has no sympathy for what has been called the permeation theory), yet the little volume is a sufficiently faithful presentation of the essential and distinctive doctrines of the Church. Besides an introductory page and a final summary of nine pages, the work consists of five chapters, the subjects of which, and the amounts of space given respectively to their consideration, are indicated by the following headings and numbers of pages: God the Creator and the Divine Creation, three pages; The Human Spirit, Mind, and Soul, five pages; The Spiritual World, fifteen pages; The Sacred Scriptures, eighty-one pages; and The Lord the Redeemer and Saviour, twenty pages. Some persons may be inclined to question the balance of the various little treatises involved in the whole work, of which the chapter on the Sacred Scriptures makes considerably over one-half; though we are inclined to think that of the various chapters this one is likely to give most pleasure to New-Churchmen, as giving from a New-Church standpoint, a bird's-eye view of the whole scope of Scripture, together with a brief statement concerning Swedenborg's function as an ex-

**What the New Church Stands For; the Distinctive Doctrines of the New Jerusalem.* By BAMAN N. STONE. (Manual of Religious Instruction: Doctrinal Series No. V.) New York: New-Church Board of Publication, 1912. 140 pp., 24 mo. Cloth, 50 cents.

pounder of Scripture. The other chapters, we fear are likely to seem somewhat too concise and too baldly dogmatic to be altogether clear and interesting to such readers as are not already somewhat acquainted with New-Church doctrines. For such persons, some of our less expensive and even less voluminous treatises will, in our opinion, continue to be more acceptable introductory manuals. We hope, however, that this new volume will have a career of wide usefulness. We note that it has been added as No. 5 to the Doctrinal Series of the Manuals of Religious Instruction, which fact seems to imply that it is rather intended to be a doctrinal text-book for our own children than an explanatory sketch for others. Moreover, the price would prohibit its wide use in missionary ways. As a final word we will say that we are pleased that in this last addition to their Doctrinal Series the publishers have departed from the unattractive appearance of their previous manuals; and now that the uniformity has been broken, we hope that future issues of the other Manuals will abandon their old dress in favor of something like that of this new volume.

B. A. W.

PROPOSED REPRINT OF THE "ANIMAL KINGDOM."

As a matter to which the attention of our readers should be called, so that they may co-operate in the undertaking, we reprint the following notice from the October, 1912, number of *The New Philosophy*:

Following the publication of the Work on Generation, Dr. Boericke, the Vice President of our [Swedenborg Scientific] Association, now authorizes the editor of the *New Philosophy* to call for subscriptions for a proposed new edition of Swedenborg's work, "The Animal Kingdom." It is not proposed to make a new translation or even a revision, as this would involve too much labor and delay. What is proposed is simply to reprint the translation by Dr. Wilkinson originally published in two volumes in London, 1843-4, and since reprinted in America. The work is now exceedingly rare and is practically unobtainable.

The reprint by Dr. Boericke will be undertaken PROVIDED THERE BE 200 SUBSCRIBERS, AT \$8.00 FOR THE TWO VOLUMES. The work will be published within two years after commencement of printing and will be sold to non-subscribers at not less than \$10.00 for the two volumes.

Subscriptions should be sent to The Editor, *New Philosophy*, Byrn Athyn, Pa.

ECCE DEUS.*

As one of the signs of the times this book is a notable production. The author is evidently ambitious to take a high place among the leading Bible critics of the day, and is at great pains to give his views an impressive historical setting. From this point of view the book is a fair specimen of higher criticism. The play of the constructive fancy, confidence in probable inferences, and a certain unwillingness to take facts, especially the matter-of-fact statements of the Bible, at their face value, are all abundantly illustrated.

Not content with the usual honor of high enrollment among Bible critics, our author is persistently industrious to attain a unique place among New Testament interpreters. He ignores the orthodox interpreters, and puts himself in square opposition to the whole band of "liberals."

This attitude is significant in that it involves the issue between the *literalists* and the *symbolists*. The higher critics have devoted an immense amount of labor to show that the Gospels tell the story of a unique life, but in the strictest sense a completely human life. When we undertake to collect and compare the results, they turn out to be astonishingly meagre. The lack of agreement, too, is so striking, that the whole work is discredited; and it seems not unfair to say, that it is only necessary to pit one higher critic against another to destroy both. The book before us is ample testimony on these points.

**Ecce Deus; Studies in Primitive Christianity.* BY WILLIAM BENJAMIN SMITH. [Issued for the Rationalist Press Association, Limited.] London: Watts and Co., [Chicago: Open Court Publishing Co.] 1912. 24+352 pp., 8 vo. \$2.25 net.

The difficulty which the higher critics encounter, is the manifest two-fold character of the Lord, the human and the Divine, represented in the Gospel story taken as it stands. The liberals have undertaken to get rid of all the supernatural features, and reduce the story to the level of an ordinary narrative. The results, as above said, are meagre and conflicting. The critic accepts what from his point of view seems natural, and the rest he tries to explain by elaborate historical argumentation and construction. The process of inclusion and exclusion varies with each critic, so that the general result is dissatisfaction and renewed efforts.

It would seem that there are three possible views open to readers of the New Testament: (1) that the letter as it stands is authoritative and final, and that the reading must conform to its requirements; (2) that in the letter we have the basis of the original matter of fact material, but that it has been brought into its present form by various hands through addition, reconstruction, and adaptation, and that the reading must distinguish fact from fiction; (3) that the symbol is the original and essential element, and the matter of fact a later development.

The book before us is an ingenious and elaborate attempt to maintain the last view. Following the line of his former book, *Der vor-christliche Jesus*, the author undertakes to show that the concept of Jesus was built up out of the religious elements of the age, and by the forces of the circum-Mediterranean civilization. It does not appear that he proceeds from historical considerations, for nothing is more striking than the absence of Christian elements in post-Aristotelian philosophy, for instance in Philo; and certainly Plotinus, in whom Hellenic philosophy culminated, is as far as possible the antipodes of Christianity.

If we look for the motive, we find it apparently in the suggestion, that the obvious symbolic character of much of the Gospel narrative indicates the real nature of the whole. Accordingly we find him arguing strenuously that the New Testament is symbolic throughout and in every particular. But this view involves for him consequences disastrous to the

ordinary conception of Christianity; for he goes to the extraordinary length of maintaining that the personal elements of the narrative are late accretions, and the work of deliberate and accomplished symbolists, and therefore that the Jesus who is the subject of this symbolism is really a symbolic character, not at all an historic person who walked the earth, spoke and ministered as he is represented. The argument is noteworthy. The obvious and supreme fact of the Gospels is, he says, that Jesus is represented as God. All the labors of the "liberal" critics to show that he is represented as mere man are flat, manifest failures. The words here are worth quoting.

That this Being, this Jesus, is presented in the New Testament, and accepted in all following Christian history, as a God, is evident beyond argument. It is made clear on almost every page of the New Testament with all the clearness that can belong to human speech. There is no debating with any one who denies it. But it is equally clear that he is also presented as a man, as conceived, born, reared, hungering, thirsting, speaking, acting, suffering, dying, and buried—and then raised again. How then are we to conceive *this* Being? The answer of the present church, of orthodoxy, is unequivocal. We must conceive him precisely as he is represented, both as God and also as man. But suppose this be impossible . . . Right or wrong, for good or for ill, the human spirit has gone definitely and finally beyond it, and it is hopeless to suppose it will ever retrace its steps. Indeed, it could not if it would. The reason of this and the next centuries can no more believe in the God-man (in the orthodox sense) than it can believe in the geocentric theory of Ptolemy or in the special creations of Linnæus. For reason constituted as it now is, the God-man is a contradiction in terms.

[This being the case, what is to be done?] Resolve the antinomy God-man into its constituents . . . Affirm the one and therewith deny the other . . . The normally acting intelligence . . . must affirm one of two opposite theses: Jesus was a deified man, or the Jesus was a humanized God. There is no *tertium quid*. One of these alternatives is necessary, the other impossible; one is true, the other is false. Hitherto criticism has with practical unanimity assumed the first alternative, and thus lavished its splendid resources of learning and acumen in the century-old attempt to understand the New Testament and primitive Christianity from the standpoint of this assumption . . . The notable fact is that, in spite of all the knowledge and constructive talent called into play, none of these endeavors has been crowned with success.

Forthwith our author accepts the other alternative, that Jesus is a humanized God. That is, he was first conceived as God, and afterwards represented as man. With the details of the argumentation we cannot here concern ourselves. It proceeds in general along two lines: (1) refutation of the arguments in support of the thesis that Jesus was a deified man on the one hand, and (2) efforts to establish the contrary thesis on the other.

The sum and substance of his contention is, that in its earliest form and in its origin Christianity was the preaching of monotheism as opposed to the reigning polytheism. The name Jesus was selected for etymological and historical reasons, and adopted as the name of the one God. For prudential reasons, especially, the preaching was carried on in symbolic language. Later this same form of language was employed to make the idea of the one God concrete. In a section on examples of symbolism the author has some interesting things to say in the way of giving the symbolic meaning in certain selected instances. The demoniac of Gerasa is heathen humanity; the legion of devils, the false gods of polytheism. In the blessing of the little children, the children are believers. And so on. In the end he is bold to assert "that there is not a single human trait or act ascribed by Mark to the Jesus."

Against the position that the Gospel narrative is both literal history and symbolic, he argues:

Consider the case of the healing of the withered hand . . . it was Jewish humanity lamed by tradition, healed by the new doctrine . . . But suppose the incident had actually occurred. What would have resulted? Amazement, doubtless; but would any one have dreamed of the symbolic meaning? Certainly not. Even supposing the Jesus had followed up the miracle with an explanation of its significance, it could have made no impression. Every one would have thought of the astounding miracle itself. No one would have cared for the explanation, which would have seemed trivial . . . it is quite impossible that any one should perform some confounding miracle . . . and then explain it typically. Such an act would defeat its own object . . . We may then dismiss the conceit that the Jesus performed emblematic wonders as merely puerile. Nor can it be said that the symbolism was not intended

for them, but only for now, to teach us. Impossible; for, unless we already have the ideas symbolized, we cannot understand the symbol. No! Those incidents, so often miraculous, are merely symbolisms.

We have thus selected two characteristic points of the author's view and argument, and it is curious to note that on both of these his position is directly opposed to that of Swedenborg. It is hard to resist the surmise that if he should read Part I. of "Divine Love and Wisdom" and the early chapters of "Arcana Cœlestia," he would see his subject in a new light. He would see there the philosophy of the doctrine of God-man, and a most illuminating application of the law of correspondence. He would see that the symbolism of the New Testament by no means excludes the historical truth of the letter, but rather demands it.

If we may take this book as an indication of the future trend of higher criticism towards recognizing that on its face the Gospel story unquestionably represents the Lord as God-Man, and that its language is symbolic throughout, it would seem that the way is opening for scholarship to come straight to the New-Church position. It seems altogether improbable that Christianity will ever accept the author's unnecessary and disastrous contention, that Jesus never actually lived as a man on the earth. Christian history and Christian experience testify overwhelmingly to both his humanity and his divinity.

L. F. H.

TWO HISTORIES OF ISRAELITISH LITERATURE. *

THESE books cover more nearly similar ground than their titles would lead one to believe. Dr. Welch's book covers less

**The Religion of Israel under the Kingdom.* (The Kerr Lectures, delivered in the United Free Church College, Glasgow, during session 1911-1912.) By the REV. ADAM C. WELCH, *Th.D.* Edinburgh: T. and T. Clark. [New York: Chas. Scribner's Sons.] 1912. 305 pp., 8vo.

A History of the Literature of Ancient Israel from the Earliest Times to 135 B. C. By HENRY THATCHER FOWLER, *Ph. D.* New York: Macmillan Co. 1912. 392 pp., 8vo. \$2.25 net; postpaid, \$2.45.

ground, restricting itself to a shorter period than that with which Dr. Fowler's deals; but resembles the latter's book in being largely a study of Israel's literature, arranged, too, historically, the order followed being that indicated in the main findings of Old Testament criticism. For that reason it seems an unsatisfactory study of Israel's religion under the kingdom. There ought surely to be more difference between a history of literature and a history of religion than there is between these two books. Dr. Welch's book, it seems to us, is too directly occupied with an interpretation of the literature of the kingdom. The religion of the monarchy must be reached, of course, through contemporary writings; but we miss what we expect to find at last, any direct treatment, any eye-to-eye estimate, of Israel's religion during that period. That topic seems not to be definitely and separately reached, but only approached as it is reflected in the literature of the time, from which, however, Jeremiah, by the way, is expressly excluded on plain and good grounds, while Micah and Zephaniah are considered incidentally, the former to the presentation of various ideas, the other to the consideration of Amos.

Will any satisfactory history of the course of Israel's religious life be written until the writer grasps from the facts that central conception of the Jewish Church which the Doctrines of the New Church, in their historical references to that church, define and outline? Religion as it actually existed among the mass of the Jews and Israelites from the institution of their "church" at Sinai down to its corruption and close, was a thing of statute and rite, a ritualistic representation of the religious life. This idea is briefly put in the common statement, that Israel was but the "representative of a church." It seems to us that only as this fact is kept in sight in the study of Israel's religious history, will the actual religion of Israel, and not the attempted religion of the prophets, be got at; and the actual intent and achievement of its teachers and prophets ascertained. Until then a religious genius will be ascribed to the Jews which they never possessed; and the general course—the rise, height and decline—of the Jewish Church obscured. We should lay not a little of the

diffuseness of Dr. Welch's book, and its absence of clarifying generalization, to just this failure to see the Jewish Church as "the representative of a church." Only that view can yield true and illuminating summaries of Israel's religious history. How far the author was from taking any such view is patent from the fact that he has not given the sacrificial system any separate but only incidental treatment, whereas that system is at the heart of the dramatic and representative ritual which enabled Israel to play the part of a church.

The book is richly suggestive in its frequent departures from one current theory and another: these are supported in detail in notes appended to the text.

Dr. Fowler's book is at once clearer and more enlivening reading. It is very interestingly done. Opinions will vary as to its value according to the estimate put upon the results of Old Testament criticism. Bible students who think those results too uncertain to base on them a history of Israel's literature, will think that Dr. Fowler might have waited more than the twelve years which he did wait before he brought out this book. If they think the larger results of Old Testament criticism well established (and Dr. Fowler works with those upon which there is a consensus of scholarship), they will find his book a thorough, well-connected narrative of Israel's literature. And it seems as though any reader, though he be shy of the historical dating and setting given to various parts of the literature, and certainly cautious about the very delicate analysis of the Old Testament into earlier and later, revised, redacted and compiled strands of story—it seems as though even such readers must enjoy the literary interpretation they will find in the book, its exhibition of the charm, the formal beauty, the wonderful imagery, of ancient Israel's great books.

The history is topical and chronological at the same time. The chronology rests on the chief results of Old Testament criticism. Genesis, Exodus, Leviticus, Numbers, Deuteronomy and Joshua, as we have them now, came into existence about the close of the fifth century B. C. At that time they are the outcome of the compilation of two early strands of narrative, the earlier of these from the ninth century and from

Judah, the later from the eighth and from Israel; to both of which there was added in the seventh century the Deuteronomic Code, and in the sixth the codification of Leviticus. Isaiah is of course accredited to more than one author; the Psalms are assigned to dates all the way from David's time to years late in the period considered; the early chapters of Genesis are divided largely between the two early strands of narrative, their age being left open, and their origin chiefly deemed to be Babylonian; the "Song of the Sword" (the little verse sung by Lamech) is assigned, however, to the Wilderness Period; so also is the quotation from the "Enunciations" in Numb. xxi, 27-30; the compilation of the Book of the Wars of Jehovah and the composition of Jashar are referred to the period of the Undivided Monarchy; Job to the latter part of the fourth century.

These latter details of the dating of various books and parts of books are mentioned because the New-Churchman would be especially interested to see what an historian of Israel's literature would do with these parts of it. He knows the "Wars of Jehovah," for instance, as the historical section of the Ancient Word, which was lost when the Old Testament began to form. On other grounds than those of textual or higher criticism he would refer it to pre-Israelitish times; Dr. Fowler has no data which the New-Churchman would violate by so doing. The like is true of other ancient material incorporated into the Old Testament, like Gen. i-vii, including the "Song of the Sword," and the quotations from "Enunciations." Concerning that Song Dr. Fowler makes an interesting suggestion, not wholly his, however. He thinks that perhaps the Song was part of the traditional lore with which the Kenites enriched Israel's literature. In the light of what we know of the Kenites, it is entirely possible that they were the channel by which portions of the Ancient Word came into the possession of the Israelites, or of Moses, whose father-in-law was a Kenite.

To this historical framework of his story there is hardly any objection to be made on historical data, on whatever other grounds objection could be lodged against Dr. Fowler's confidence "that the historical order set forth rests on a firm

basis." At all events, here is a running account of Israel's literature, clear, often luminously imaginative, drawing interesting, sometimes distinctly helpful, analogies with the history of English literature; describing fluently the occasion, meaning and charm of Israel's varied books.

WM. F. WUNSCH.

ETERNAL LIFE*

The author gives a historical summary of the views on Eternal Life held by the great religious teachers and by the great philosophers from the earliest Oriental, Hebrew, and Greek days down to the present. As such the book is interesting and valuable.

Eternal Life is considered not as mere endless continuance, nor as mere future existence, but as full rich qualitative existence. The notion of *totum simul* is included, but variously qualified. Among others, the views of Plato, Plotinus, Aquinas, Spinoza, Bergson, receive special treatment, and are discussed from the Roman Catholic standpoint.

The book ends with a brief statement of conclusions, where the attempt is made to specify the various qualities which belong to Eternal Life. On the whole the book is wholesome, but rather technical for the general reader.

L. F. H.

WAS CHRIST DIVINE?†

The author gives a very clear and scientific argument to prove that man is not merely a highly developed animal, but stands on a distinct plane above them. He next shows the

**Eternal Life; a Study of Its Implications and Applications.* BY BARON FRIEDRICH VON HUGEL. Edinburgh: T. and T. Clark. [New York: Scribner.] 1912. 50+443 pp., 8 vo. \$3.25 net.

†*Was Christ Divine?* By WILLIAM W. KINSLEY, Boston: Sherman French and Company, 1912. 144 pp., 12 mo. \$1.00 net; by mail, \$1.10.

necessity of the Messiah, of One who is in most intimate relationship to the Divine Spirit. He refers a number of times to Bushnell's views in regard to Christ, and regards them favorably. He shows that Christ claimed to be Divine, that there was no imperfection in Him. The author emphatically protests against the orthodox doctrine of three persons in the trinity, yet he is not clear as to the relation of the human and the Divine. He says, "Why set out on the bootless quest of precisely how, or to what extent the Divine and the human were conjoined in Christ?—Why not accept trustingly and gratefully as a fact of priceless promise that they were in some way actually conjoined, and the long sought for ideal life was somehow actually attained?" p. 90. The author favors the view, "that Christ was of a dual nature, lived a dual life, had two infinitely different spirits alternately animating and controlling his body,—that at times only the human was manifest with its many weaknesses and limitations, its longings and its griefs, and then again only the Divine appeared, teaching with authority, forgiving sins, scanning the secret intents of the heart, lifting the curtains of the future, healing the sick, restoring the blind, even raising the dead," While gaining glimpses of the truth, the author does not give a clear statement of the relation of the Divine and the human, but illustrates it by cases of dual personality which verge upon obsession, rather than by the relation of soul, mind, and body. Nevertheless we find in this work a great step in advance over the traditional orthodox view of three persons in God. A study of Swedenborg's teaching concerning the glorification of the human would solve the author's chief difficulties.

JOHN WHITEHEAD.

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